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ABSTRACT

Noting that many elements of the English classroom--printed books, paper, pens, and typewriters--now considered indispensable were once innovations in technology, the articles in this focused journal issue explore the impact of electronic technologies on the English classroom and how to adapt those technologies to instruction. The essays deal with writing in an age of technology, computers in education, and technology and society. The titles of the essays and their authors are as follows: (1) "Teaching Technical Writing to Influence Potential Technocrats" (Bruce W. Speck); (2) "A Case for Teaching Technical Writing in the High School" (Dennis M. Walsh); (3) "Visual Literacy Comes of Age" (Hilary Taylor Holbrook); (4) "Using Television in Teaching the Language Arts" (Samuel A. Perez); (5) "Encountering 'The Day After'" (Ulrich H. Hardt); (6) "Audio-Visual and the Basic Writer" (Sallyanne H. Fitzgerald); (7) "Buddy Writing, Paragraph Skeletons, and Overhead Transparencies: Strategies for Teaching Paragraph Writing" (Gene Fazio, Judy Pearce, and Gwen Rowley); (8) "The Overhead Projector: That Model-T with a Laser-Option"; (9) "The Camera Eye and Two Freshman Writers" (David Sosnowski and Russell E. Stratton); (10) "Advent of the Post-Gutenberg University" (Joseph Raben); (11) "The Computer and the College Composition Class: Projections" (Ruth Gardner); (12) "Personal Computer Ads: The Power of the Pitch" (Jane Connelly); (13) "Strategies to Battle the Problem of Academic Inertia" (Pepper Worthington); and (14) "Knowledge and Imagination" (Hugh Burns). (HTH)

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ARIZONA ENGLISH BULLETIN

TECHNOLOGY AND THE TEACHING OF ENGLISH

Volume 26 Number 3

Spring/Summer 1984

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ARIZONA ENGLISH BULLETIN - - - - - A Member of the NCTE Exchange Agreement

The ARIZONA ENGLISH BULLETIN is a publication of the Arizona English Teachers Association, a nonprofit state affiliate of the National Council of Teachers of English. The BULLETIN exists to create effective statewide articulation of English and Language Arts teachers at all levels, to increase awareness of new ideas, programs, and movements in English, and to improve instruction at every level.

Membership in the Arizona English Teachers Association (including a subscription to the ARIZONA ENGLISH BULLETIN) is \$15 per year for individuals within the U.S. and \$20 per year for institutions or for individuals outside the U.S. (Students \$7.50)

The ARIZONA ENGLISH BULLETIN is published three times each year, in the Fall, the Winter, and the Spring. It is supported and subsidized by the Arizona English Teachers Association, Arizona State University, Northern Arizona University, and the University of Arizona.

Back issues since October 1979 can be ordered from the editor for \$5 apiece. Issues published during prior years are not available unless they have been picked up for national distribution by the National Council of Teachers of English. A number of such issues are, however, now available through NCTE. They are listed in the NCTE catalog. Check the most recent issue for titles and prices. Copies can be obtained from NCTE, 1111 Kenyon Rd., Urbana, IL 61801.

Topics and deadlines for forthcoming issues are as follows:

- Fall 1984: Writing Across the Curriculum (Sept. 15, 1984)
- Winter 1985: Reading and Writing Connections (Nov. 1, 1984)
- Spring 1985: Teaching Literature and Creative Writing (Jan. 15, 1985)

AEB welcomes manuscripts on these or other topics of interest to teachers of English and Language Arts at all levels. Manuscripts should be limited to 10-12 typed, double-spaced pages. Notes should be incorporated into the text (APA form) or typed following the text (MLA form). The editor reserves the right to make minor textual changes in the interest of clarity or space limitation. Send manuscripts to

Margaret Fleming, Editor
% Department of English
University of Arizona
Tucson, AZ 85721

Manuscripts will be reviewed and replies sent, usually within 6-8 weeks, but occasionally later, depending on the editor's teaching schedule and other responsibilities. Authors of articles that are published will receive two contributors' copies.

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CALL FOR PAPERS

While I am on sabbatical leave during the second semester of 1984-85, the Spring issue of the BULLETIN will have two guest editors, Marvin Diogenes and Clyde Moneyhun. Marvin and Clyde have worked together before on many projects. They have co-edited several editions of A STUDENT'S GUIDE TO FRESHMAN ENGLISH, published every year by the University of Arizona's composition program. Readers of the BULLETIN will remember that they also co-authored an article in the Winter 1984 issue.

Marvin and Clyde both have M.F.A. degrees in Creative Writing from the University of Arizona. Marvin has been managing editor of SONORA REVIEW, and Clyde has been Non-Fiction Editor for the literary magazine TELESCOPE. They both have a great deal of experience and interest in the teaching of freshman English.

While they have not decided on the exact title for the Spring issue, they invite articles on any aspect of the teaching of literature or creative writing. Here are some suggestions, which they hope will suggest others. MF

Designing a Poetry Unit
Teaching Haiku
Film and TV as Dramatic Literature
Writing Short Short Stories
The Uses of Metaphor in Writing
Overcoming Poetry Anxiety
Teaching Students to Write Plays
The Rhetoric of Poetry and Fiction
Applications of Reader-Response Theory
A Literature Curriculum for Junior High
From Narration to Exposition
Literary Terminology--How Much?
Student Poetry
Teaching (a particular novel, play, poem, story)
Writing Group Stories
A Junior Novel of Literary Merit
Writing about Literature
Literature for Special Students
Short Story as Rhetoric
New Ideas for Teaching Drama
Grammar and Poetry
A Literary Unit on (a particular theme)
Reading and Writing Occasional Poetry

Send manuscripts before January 15, 1985 to

Marvin Diogenes
% Department of English
University of Arizona
Tucson, AZ 85721

FROM THE EDITOR

The title of this issue, "Technology and the Teaching of English," may conjure up images for some of us of rows of students sitting glassy-eyed in front of computer terminals, typing in ENTER or GOTO and waiting for the next direction. Our humanistic souls rebel at this mechanization of instruction. We can't bear the idea of students' interacting with computers instead of with us. We fear being demoted from the position of chief actor and facilitator in the classroom to that of mere technician: "Ms. X, how can I get this to print in all caps?" "Mr. Z, can you figure out why this keeps reading 'Error'?" In our darkest moments, lying wakeful at 4 A.M., we may wonder just how long it will be before we are replaced--yes, REPLACED--by computers.

In these circumstances it may be comforting to reflect on the histories of the many technologies--some of them quite ancient--that we have come to depend upon in the teaching of English. Many of them are so familiar that they have lost the taint of technology. Not all of them are ancient, of course. Many of those I'll describe have been developed, or at least come into common use, within my lifetime. It's illuminating to realize how many of them have become all but indispensable to me in that short (well, relatively short) period of time. I've consulted the *ENCYCLOPEDIA BRITANNICA* for facts and dates where my own memory wouldn't serve.

Most important of all the technologies we use is the technology of print. The center of our concern as teachers of English is the written word. And for readers of books ever since 1453 the written word has meant the printed word. Without the technology perfected by Gutenberg so many centuries ago, how could we even begin to think about teaching literature? There have been many improvements in that technology since 1453--from movable type to automatic typesetting to electronic typesetting--but the result, the printed book, has been a staple of our profession for as long as we've had one.

As for writing, what ancient technologist was it who first figured out how to press wedges into soft clay, thus making a more durable record than that of a stick in the mud? And when another ancient technologist figured out how to chisel symbols in stone, a method of recording was created whose durability has never been surpassed. Melted wax poured into a tray to harden and then impressed with a stylus had the virtue of being reusable, as did slate, which could be wiped clean over and over.

The technology of preparing papyrus, which goes back to the second century B.C.E. in Egypt, led to the manufacture of paper, a very sophisticated process, said to have been known in China in the second century B.C.E. but not introduced to Europe until the eighth century. Could any teacher function without paper? Could any school be run without it? No, paper and paperwork have become indispensable to our schools as to our society at large. We've developed other technologies for producing materials on which to write too, some designed especially for classroom use: slate, then blackboards made of some sort of composition material, then green boards made of something similar, and now white metal boards with dry markers--not to mention overhead projectors with transparencies that can be written on with grease pencil.

And in writing implements we've come a long way from the stick, the chisel, and the stylus. The quill pen, known as early as the seventh century, gave way in the 19th century to the steel pen, which gave way to the fountain pen, which has been largely superseded by the ball point pen and the felt tip pen. I remember when the first ball point pens came on the market. My parents bought one for \$18. And while I'm not quite old enough to remember quill pens, we did have steel pens when I was in elementary school (we called it grade schol in those days), and our desks had round holes in the upper right hand corners into which inkwells could be dropped, and yes, I had pigtails, and yes, I was sometimes subjected to having them dunked into the inkwell by the mischievous boy sitting behind me.

Pencils have been known, again according to my *ENCYCLOPEDIA BRITANNICA*, in essentially their present form since the 16th century. It's not clear from the article whether they were originally made from lead, which is something I've heard, or whether they got the name lead pencil because the graphite used as the central core was mistakenly thought to be lead.

From pens and pencils we progressed to typewriters. The first patent on a typewriter was issued in 1714, but they were not produced or used with any frequency until after 1850. The mechanical typewriter was greatly improved by making it electric, and it wasn't too many years ago that an IBM Selectric was the last word in typewriters. That was before electronic typewriters--word processors--became so common, and we haven't heard the last word on them yet, not by a long way. With word processors, it is possible to compose, revise, and edit without paper.

And speaking of revising and editing, those processes too have their history of technology. Early inks had to be erased by scratching with a knife blade. Then technology produced erasers from a substance that was originally known as gutta percha but soon acquired the name rubber from its function as an eraser. Various technologies have since been developed to make revision easier. Erasable bond paper is one I've been familiar with since I started writing papers in college. Then someone invented paper correction tape which can be inserted into a typewriter to cover errors and provide a surface for retyping. It was also helpful, but to my mind liquid paper was the real breakthrough. To anyone less than a perfect typist, to anyone who doesn't have a self-correcting typewriter (another breakthrough), liquid paper is virtually indispensable. I don't know how we managed without it. Now, of course, word processing programs can delete errors electronically before they're ever printed.

I haven't mentioned ink. The old inks, made from gall and various other substances, dried slowly, and the custom in earlier days was to sprinkle sand over writing to absorb the excess. The sand could then be blown or brushed off. This was no doubt messy and inconvenient. Blotting paper was a great improvement. The time was when every well-equipped desk had a large blotter, often in a holder with tooled leather corners. The paper had to be changed, frequently or infrequently, depending on how much one wrote. Small blotters were often given away by advertisers, who printed a message on the smooth side, leaving the absorbent side blank for blotting. Quicker-drying inks and ball point pens have made these once-useful accessories unnecessary. I can't even remember when I last saw a blotter--of any size. Are they still being made, I wonder.

The processes of copying and reproduction exemplify another series of technologies upon which most teachers have come to depend heavily. The printing press has been around for a long time, but until recently if any of us wanted to copy documents for our own use or make multiple copies of anything, our only resource was to copy the original by hand. Then we had carbon paper, still very satisfactory (and cheap), but with the disadvantage that it can make only a limited number of copies. I suspect that most schools and offices now prefer to use photocopying. Spirit masters (dittos), another staple of our profession, are a fairly recent development. I can't quite pin down the time when they first came into use, but I don't remember any either from grade school or high

school. I do remember my mother's reproducing something on a home-made hectograph, made by cooking unflavored gelatin with glycerin and pouring it into a cookie sheet to harden. A carbon image, in reverse, could be transferred to the gelatin and one sheet of paper after another moistened and laid on it to receive the image. (I have the directions for making one, if anyone's interested.) The great disadvantages were that the process was slow, the master image had to be scrubbed off the gelatin after every use, and the gelatin itself had to be melted down and replenished frequently. I think dittos must have come into general use somewhere between 1950, when I graduated from high school, and 1958, when I began teaching. They were already commonplace then. (I still remember the first one I made; I forgot to remove the tissue paper between the master and the carbon sheet. Is there anyone who hasn't made that error at least once?) It seems impossible now to imagine teaching without dittos, unless, that is, we teach in a school that has already gone over to the exclusive use of photocopying (Xeroxing).

I was talking to a younger colleague recently at a party, and he happened to mention the amount of money he had spent Xeroxing citations while writing his dissertation. I felt a momentary pang, remembering all the hours I had spent copying by hand while writing mine. Yet less than 10 years separated the time I did mine (in the mid-60's) from the time he did his (in the mid-70's). Technology is expanding all around us all the time.

The daguerrotype, forerunner of the photograph, was invented in 1839. Since then we have gone from sepia to black-and-white to color photography, from still pictures to moving pictures to sound films to cinemascope and other enhancements. Black-and-white photography is still beloved of many photographers for its contrast and variety in tone and texture, but it has the disadvantage of being messy and time-consuming to develop. New developing processes, however, are becoming more and more streamlined. Polaroid packaged the developing process with the film, but video did away with it altogether by producing instant electronic images. The newest development in this area is the video disc, which not only has extremely high fidelity of sound and image recording for films but can store printed material in a series of still pictures. One estimate says that the entire Library of Congress could be stored on a single disc, with instant access to any page at the touch of a button.

In the area of sound recording, the wax cylinder invented by Edison in 1877 gave way to the hard disc then to long-playing records, 45 RPM and 33 1/3 RPM (I remember when that happened), and then to stereophonic sound and quadraphonic sound. I also remember when wire recording and tape recording came in--at about the same time. For a while they were in competition as to which would prevail, but eventually tape did, and while reel-to-reel is still in use where higher fidelity is desired, it has largely been displaced by cassettes for popular audiences. And where are all the 8-tracks of yesteryear?

I suspect that few of us use these audio-visual aids as much as we might because of the time necessary to search and preview the materials, the hassle of scheduling, and the fear of equipment breaking down, but it's surely a rare teacher who hasn't--at least once in a while--shown slides of the Lake Country when teaching Wordsworth or a film about an author's life, or played a tape of a Shakespearean play or videotaped an outstanding TV dramatization of a novel, or used a filmstrip to illuminate a point about composition or projected a transparency of student writing. These aids enhance our teaching of literature and writing; our curricula would be poorer without them.

Analyzing the chronology of these developments points up how the process has accelerated. From the invention of paper to the invention of the printing press was 1700 years; from the printing press to the typewriter 400 years; from the typewriter to the word processor 100 years; from sound recording to video recording 70 years; from video recording to video disc 20 years. Our ability to acquire, store, and process information is growing at an ever-increasing rate.

The ancient writer, scratching clay or wax with a stylus, could be sure of reaching only a very limited audience, those to whom the tablet could be handed directly or indirectly. In the medieval university the audience was somewhat larger, but only the teacher had a book. As he read it to his students, the lecture (literally "reading") was born. Only with the invention of printing did a writer's presumed audience reach thousands rather than hundreds. Now the possibilities are almost limitless. The entire Library of Congress on a single disc; all the current research on any given subject accessible, as well as all the wisdom of the past. More information is more readily accessible to

more people than ever before. And if information is the raw material of education, we should be able to help more students learn more information, make more connections, and do so more efficiently and pleasurably. We have hardly begun to do what is possible. For teachers these are indeed exciting times.

Margaret Fleming

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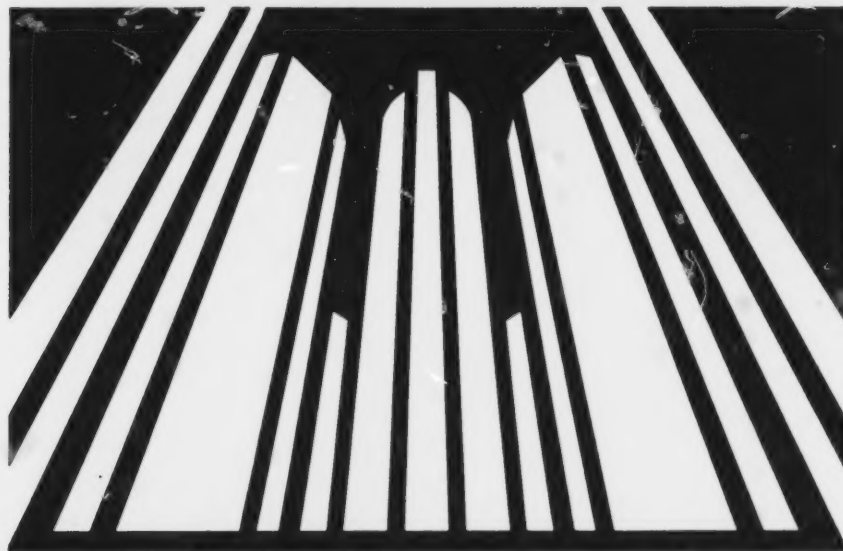
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RENAISSANCE



DETROIT 1984



NATIONAL COUNCIL OF TEACHERS OF ENGLISH

**74TH ANNUAL CONVENTION
NOVEMBER 16-21, 1984**

ART AND SCIENCE OF TEACHING ENGLISH: THEME OF 1984 NCTE CONVENTION

"Teaching English 1984: Renaissance Art and Science" will be the theme of this year's annual convention of the National Council of Teachers of English, to be held in Detroit, November 16-21. NCTE President Stephen Tchudi of Michigan State University, who set the theme, said that "the year of Orwell's prophecy" is a good year to think about the diverse elements involved in the English language arts. "English teachers," he added, "have become modern-day Renaissance people, charged with teaching literature, reading, writing, language, media, interdisciplinary studies, ethics, and even computer 'literacy' to a broader spectrum of students than ever before in the history of education."

An international seminar, "Language, Schooling, and Society," will precede the convention, with representatives from the U.S., Canada, the United Kingdom, Australia, and New Zealand taking part.

John Dixon, author of *GROWTH THROUGH ENGLISH*, will speak at the opening General Session banquet. Garth Boomer, president of the Australian Association of Teachers of English, will speak at the Sunday General Session. From Nov. 16-18, nearly 150 sessions on current theory and research and their practical applications will take place. For more information, write to NCTE, 1111 Kenyon Rd., Urbana, IL 61801.



NCTE WORKSHOPS OFFER OPPORTUNITY TO STUDY CURRENT TOPICS IN DEPTH

Below are listed workshops scheduled for November 19-21 at the annual NCTE Convention, Detroit, Michigan.

TWO-DAY WORKSHOPS, MONDAY-TUESDAY, NOVEMBER 19-20

Assembly on Literature for Adolescents—NCTE (JH/MS, S, C)
Children's Literature: Bridging the Humanities (E, JH/MS) Sponsored by the
Children's Literature Assembly
Establishment and Operation of a Reader-Response, Peer Tutor-Based Writing
Center(JH/MS, S)
The Visual Arts in Writing Instruction (JH/MS, S)
If You Want Software That Really Works, Write It Yourself: Developing
Computer-Assisted Instruction for Your Composition Classroom (S, C)

ONE-DAY WORKSHOPS, MONDAY, NOVEMBER 19

Computer Software for the English Curriculum: What's Possible (G) Sponsored by the ERIC Clearinghouse on Reading and Communication Skills
 Integrating the Language Arts in the Elementary School Experience (E) Sponsored by the Speech Communication Association
 Ten Speeds, Four Promises, Seven Dwarfs: Teaching in the Key of Life (A Celebration of Language Experiences) (E, JH/MS)
 Teaching Minority Literature with Confidence: Insights, Strategies, and Resources (S,C) Cosponsored by the NCTE Hispanic Caucus and the NCTE Minority Affairs Advisory Committee
 Affiliate Development Workshop (G) Sponsored by the NCTE Standing Committee on Affiliates
 National Writing Centers Association Workshop (C) Sponsored by NWCA, an NCTE Assembly
 Two Successful Strategies for Writing in the Classroom: Prewriting and Peer Editing (S)
 Teaching Technical and Professional Writing (S,C) Sponsored by the NCTE Committee on Technical and Scientific Communication
 Identifying the Concerns of SLATE and Its Members through the Development of NCTE Position Papers (G) Sponsored by the NCTE/SLATE Steering Committee on Social and Political Concerns
 Professionals Professing: Issues, Resources, and Processes in Developing Secondary English Curriculum Guidelines (S)
 Researching Practice by Practicing Research: A Case Study in University-High School Cooperation (S,C)
 International Perspectives on New Models for English Teaching (E, JH/MS, S) Sponsored by the International Assembly
 Teaching the Writing Process with an English Teacher and a Computer (JH/MS, S)
 Teaching Women's Literature: Approaches and Critical Views (C)
 Testing: Limitations of—and What Schools Need to Do (G)

ONE-DAY WORKSHOPS, TUESDAY, NOVEMBER 20

Personal Grammars and Their Use (JH/MS, S, C)
 Using Cultural and Linguistic Diversity in the Classroom to Improve Student Writing (E, JH/MS)
 Forming Research/Writing Communities: In Classrooms and Beyond (JH/MS,S)
 The Writing and Reading Connection: Strategies for the Classroom (G)
 Interdisciplinary Junior High/Middle School English: Effective Unit Planning for Individuals or Teaching Teams. Sponsored by the Junior High/Middle School Assembly
 Poetry, Language, and Interpretation: A Landslide of Glass Houses (JH/MS, S)
 The Composing Process and Student Research (C) Sponsored by the Conference on College Composition and Communication
 Microcomputer Programs and Programming for English Teachers (G)
 New Sentence Combining Materials and Approaches (JH/MS, S)
 Professional Writing (G) Sponsored by the NCTE Committee on Professional Writing Networks

*Also being planned for Tuesday, November 20, are workshops on these topics: Composition for College (C); Gifted, Honors, Humanities? (S); Literature in the High School Classroom (S); Preschool Primary/Home-School Language-Understanding (E); and Literary Study: The Integration of Interpreting and Composing (C).

ONE-DAY WORKSHOPS, WEDNESDAY, NOVEMBER 21

Integrating Film Study across the English Curriculum: Methods, Approaches, and Materials (S,C) Cosponsored by the NCTE Commission on Media, the NCTE Committee on Film Study in the Language Arts and the Screen Educators' Society
 Getting at the Roots of Developmental Reading and Writing in Colleges (C)
 Designing Writing Assignments (Prompts) and Scoring Guides (Rubrics) for Holistic Evaluation (G)
 Improving Language and Literacy Instruction: Partnerships for Change (E, JH/MS) Cosponsored by the NCTE/IRA Committee on Strategies for Improving Language and Literacy Instruction
 Instructional Computing Applications for Secondary Language Arts Teachers (S)
 Storytelling in the Classroom (E, JH/MS)
 Innovative Techniques for Teaching Usage: The Inquiry Approach to Language Arts Instruction (JH/MS, S) Sponsored by the NCTE Commission on the English Language

Details of the workshop programs and registration materials will be mailed to NCTE members in August. For additional copies, write NCTE Convention Information, 1111 Kenyon Road, Urbana, Illinois 61801.

TECHNOLOGY AND THE ARIZONA ENGLISH BULLETIN

Ironically, the unprecedented delay in the publication of this issue can be directly attributed to advances in technology. For the last two years, the BULLETIN has been typed on the University of Arizona's high-powered word processor. Its benefits to the reader are obvious: crisp letters, proportional spacing, and justified margins, all resulting in a professional-looking text. Its benefits to the editor are considerable too. Editing is easy and quick. A whole page can be seen on the screen at once and layout or format readily changed to improve appearance. Errors can be noticed and corrected before a word is ever printed, thus saving both paper and time.

Unfortunately, these advances have made publication not more punctual, but less so. The reason is that other members of the department have discovered the same advantages and have, in increasing numbers, requested the use of the word processor instead of an ordinary typewriter for resumes, letters, grant proposals, book manuscripts, newsletters, and so on. Hence there is always a backlog of work, and sometimes the BULLETIN has to be put on hold when other jobs, judged to be more urgent, need to be done.

The obvious answer is more hardware--another terminal, for instance--but budget constraints have made that impossible until recently. Fortunately, we are now in the process of getting several microcomputers in the department, and I am told that one will be available when I need it for having the BULLETIN typed. I hope, therefore, that the next issues you receive will be not only good-looking but also on time.

M. F.

P.S. The problems mentioned above all have to do with limitations of human time and energy and material resources. Another problem with technology has to do with malfunction of the machinery. While a computer is "down," no work can be done. Even worse, on a word processor malfunction can result in the loss of whole documents. Just after I had written the above note, while the last few articles for this issue were still being typed, the secretary called me to come over and talk. When she told me that the word processor had lost all the articles on one disk, I nearly had a stroke. Fortunately--and I emphasize fortunately--

the text of the articles had already been printed. I usually edit before printing, but this time there had simply not been any chance for me to do so. So the text wasn't lost altogether, but unfortunately what was printed had not been edited or even proof-read.

I've gone through the articles looking for typos and corrected the most obvious errors by cutting and pasting. Errors in format and layout, however, were beyond my power to rectify. I apologize to any of the authors who find uncorrected errors in their articles. It hurts my professional pride to turn out a text that is less perfect than I can make it. I suppose, however, that we should all be thankful we are no worse off. Excelsior!

M. F.



National Council of Teachers of English
1111 Kenyon Road, Urbana, Illinois 61801
Telephone (217) 328-3870

January 3, 1984

Dear NCTE Member:

This is a chain letter. Don't break the chain!

During the coming year, a great many local, state, regional, and federal legislative bodies and agencies will be taking action to bring about what they perceive as necessary changes for excellence in education. It is imperative that people in power hear from professionals in English/language arts education about needs in our field. This chain letter encourages you to write to some of those people expressing your views and to invite other NCTE members to join in a national letter-writing campaign.

First, make three clear photocopies of this letter and send or give them to three other NCTE members. (You may make more than three copies if you wish, and this letter may be reprinted in affiliate newsletters to reach even more members.)

Second, take pen in hand and write at least three letters to people who are in a position to influence mandates and reforms in education. Consider writing to

- . . . members of state and local boards of education
- . . . local and state superintendents of education
- . . . editors of magazines and newspapers which cover education
- . . . leaders in parent-teacher organizations
- . . . state and national senators and representatives
- . . . your governor and the President.

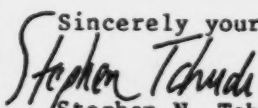
Among the topics you might address are

- . . . reasonable class size and teaching loads in English/language arts
- . . . needed opportunities for teacher in-service education through workshops and summer institutes
- . . . funds for local development of curricula in English
- . . . the effects of testing on school curricula
- . . . needed resources and materials for English/language arts teachers.

The choice of topics is yours. I am confident that NCTE members have strong opinions on a number of vital issues and will be articulate in expressing those opinions.

Don't break the chain.

Participating in this campaign will cost you only a few stamps and an hour or two of your time. The results may influence English/language arts education in this country for years to come.

Sincerely yours,

Stephen N. Tchudi
President

P.S. Write soon.

TEACHING TECHNICAL WRITING TO INFLUENCE POTENTIAL TECHNOCRATS

Bruce W. Speck

Technology has had—and continues to have—an impact on virtually every facet of society, including education. In the discipline of English, for instance, a good deal of research is being conducted to investigate the efficacy of teaching composition using word processors. But there is still a strong resistance to technology in English departments because English faculties sense that the machines, which are both the product and means of advancing technology, symbolize a philosophy that seeks to displace ideals that the humanities hold dear: individualism, freedom of expression, creativity. However, one course within English departments seems to be allied to the utilitarian philosophy of technology: technical writing. This seeming alliance has both negative and positive points, although until recently, the negative points have been stressed while the positive points have been overlooked.¹

On the negative side, technical writing has historically been assigned to sequestered places in English departments: closets, back rooms, and any other available place not occupied by the janitorial staff; any course in an English department that didn't have literature as the center of its purpose was not to be granted full respect. Technical writing was also seen as a methods course that didn't deal with scholarly endeavors. Further, technical writing was seen as an accomplice of technology. Teachers who taught technical writing were assumed to teach students how to write "good" technocratic prose or, worse, to be "good" technocrats. And the very suggestion that such a task was possible allowed members of English departments to be skeptical about the viability of teaching technical writing. Certainly, it wasn't a subject fit for a teacher trained in the finer things of life, namely, literature.

On the positive side, much of what has been misunderstood about teaching technical writing is slowly being revised. At last, technical writing is beginning to receive the attention due it. And even though the centrality of literature remains unchallenged in the thoughts of any who are true believers, the wisdom of teaching technical writing is becoming apparent to astute and progressive English faculties (who are also attempting to generate credit hours). Currently, the pressing practical emphasis on the role of the university in our society is demanding scrutiny of the university's curriculum. Those courses that somehow will be seen as pragmatic have a much better chance of being retained in that curriculum than those that are seen as merely for the "personal growth" of the students. And, although I think such a dichotomy is unfortunate, technical writing is usually seen as an eminently practical course because its rubric aligns it with the sciences.

Generating credit hours is all well and good; as a teacher I cannot dismiss the personal and professional interest I share with my colleagues for an adequate generation of credit hours. But if an attempt is made to defend an expansion of technical writing or any course or program merely on the basis of credit hours, we might as well join those who applaud technological advances simply because these

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advances save time or make life easier somehow. And I think we sell technical writing short if we continue to see it negatively as I have outlined it above. Technical writing—or technical writing as I perceive it—has tremendous potential to educate students by exploring issues that will help these potential technocrats—who are themselves predisposed to shun what they consider the sloppiness of the humanities—see that the critical approach used in the humanities is quite similar to the scientific approach they use in the sciences. Further, the teacher of technical writing can help these students see that every discipline offers only a limited view of reality, and, therefore, that if they intend to be truly educated, they must be willing to accept and to integrate knowledge from other disciplines into their discipline's worldview. With all this in mind, I want to outline some issues that will help the technical writing teacher stimulate students to consider the need for reevaluating the so-called "scientific/objective" approach to knowledge. And for those who believe that technical writing is merely a service or methods course, I want to suggest that the following theoretical issues should help demonstrate that technical writing, although it does not deal with literature, nevertheless deals with an important concern for most literature teachers: the development of critical thinking skills. In short, I am attempting both an introductory philosophy of method for the technical writing course and an apologia to those who are skeptical about the viability of technical writing as a course for those with scholarly inclinations and aspirations.

To begin, we need to challenge students' assumptions about the methodological sloppiness of the humanities by defining technical writing broadly as any writing that stresses precision in language usage so that interpretive issues are narrowed.⁴ If, however, we define technical writing as writing strictly for scientists and engineers, we soon discover that we are teaching a methods course of sorts where the issues I have raised are unimportant to the composing process and things like counting the average words per sentence, to insure that sentences are not too long, become a high mark of stylistic excellence. And, more importantly, limiting technical writing to the writing done by scientists and engineers is simply a specious view of technical writing. Technical writing is not solely the domain of scientists and engineers.

This point can be stressed by taking A Handbook to Literature by C. Hugh Holman and reading the definition of a sestet, for instance. Compare that definition with a sample of writing that would be considered technical—a bit of prose from a government document or a definition from a "technical" dictionary for one of the sciences—and you will find that Holman is a technical writer.

In fact, take any handbook from any field you like, and you will find that people in sociology, psychology, anthropology, philosophy, art, music, and others, practice technical writing. They must practice technical writing to narrow meanings, and, consequently, to develop a language that will provide them with analytical tools to describe the world in sociological, psychological, anthropological, philosophical, artistic, and musical terms. If we can demonstrate to our students that all disciplines have an active interest in technical writing, given our definition of the term, we can begin to establish the need for a unified view of knowledge that is not reserved exclusively for the so-called sciences.

While we attempt to narrow meaning by using language precisely in technical writing, at the same time we must tell students that the very nature of language will not allow us to reach this goal. Just as the calculus teacher tells mathematics students to consider a certain variable that is approaching zero but never gets there, so we must tell our technical writing students that our task in language usage is to approach language as though we could reach a state of specificity that would allow anyone,

anywhere to perceive one and only one meaning, although we realize this is never completely attainable.

Now our students might balk at this last statement. They will admit that specificity certainly seems to be highly questionable in literature classrooms, for instance, where, they believe, almost any interpretation of the data is equally as valid as any other interpretation. The same principle applies to art and music. Students believe that "whatever you think is right, is right." But, in their minds, this interpretive principle doesn't apply to the sciences where observations about data are based on solid FACTS. And even though this attitude may make our task more formidable, we are obligated to show these skeptical students that no discipline ever reaches zero, in calculus terminology, since all disciplines are plagued with a margin of interpretive variance that simply cannot be considered insignificant or statistically unimportant; no discipline can discuss matters of truth with an assurance that is not somehow grounded in faith. One way to demonstrate that, indeed, methodological sloppiness is inherent in all disciplines is to show that interpretive variance is significant because it is compounded as it goes through at least four successive stages. These stages are discussed below and a variety of examples given so that teachers of technical writing will have a basic understanding of the methodology I am proposing.

Stage 1. A microscope is made by a manufacturer of scientific instrumentation. This is a precise piece of equipment. But how precise is it? Can we say that the microscope has no margin of interpretive variance? Is it a perfect instrument? That is, if a perfect eye could be found to look through this microscope would the microscope in any way hinder the eye from seeing perfectly whatever was to be seen? One would be hard pressed to defend the perfection of any microscope because it is man-made. The very construction of the microscope depends upon judgments—or interpretations of available data—made by those who build microscopes.

For example, when Corporation A produces microscopes, at least three variable are at work: theory, craftsmanship, and materials. The theory of optics is based upon scientific knowledge, and for the moment let's assume that this knowledge is an accurate description of reality. What happens, though, when technicians or craftsmen begin to apply this knowledge to the construction of microscopes? Some technicians will ply their craft better than others. And in plying their craft, they are dependent on the quality of the materials they use. The composition of the material used for a lens says something about the quality of the view one can see while looking through a microscope. And although scientists know that there are more than three wave lengths or colors in light, the best lens in the world is only able to resolve or focus three colors. The others remain distorted. So the interaction between lens and the light is not perfect by any means. Distortions exist.

Notice also that Corporation A produces five different microscopes with five different prices. Are we to assume that all of these instruments have the same quality of lenses? Should we further assume that the materials other than the lenses have little impact on the way the lenses function—like the knob one uses to focus the lense? Further, can we assume that the specifications for making lenses do not allow some margin of error, some range within which the craftsman operates? Thus, the

materials used in making the microscope, the theoretical basis the craftsman uses to actually make the instrument, and the existence of specifications that allow some margin of interpretive variance among those who build microscopes attest to the fact that a microscope can only give one an imperfect view of a world hidden from normal human vision.

Stage 2. The scientist looks through a man-made microscope to interpret this world hidden from normal human vision. What a scientist sees is dependent upon the instrumentation being used and how it is used. Which one of Corporation A's five microscopes is the scientist using. If Corporation A makes a revolutionary breakthrough in the production of microscopes, the scientist will be enabled to see things that could not be seen before. Her interpretation of former, limited observations of the microscopic world will be changed in some way by this "new" view, a view that existed before and had an impact on the scientist's data, though it was not seen or known to exist.

Add to this the margin of interpretive variance that is implicit in human behavior, and the plot thickens. Not only is our scientist limited by the instrumentation being used, but the scientist limits the data itself by filtering it through her personal information system. If a scientist is looking for a particular phenomenon—even unconsciously—the chances of this phenomenon's being proved valid are much greater than those of an equally valid hypothesis that is not being tested. We tend to support our prejudices, often in the guise of "objectivity." Certainly, the specimens themselves have some impact on what is seen. If so, even if a perfect specimen existed, wouldn't we need to generalize from it to other less perfect specimens? Thus, at least two margins of interpretive variance are intertwined in this process of looking through a microscope—the imprecise instrumentation being used by fallible human beings who, to complicate matters, claim to be making objective observations.

Stage 3. When the scientist sets out to communicate whatever findings have been found—sets out to express this interpretation of reality—he must use some symbol system. Not only will this symbol system include "technical" symbols like formulas or words that have been created to describe a particular process in specific language—so-called technical writing—but the symbol system will also use language that in many ways is typical of the language we normally use. But it matters little if the language is Swahili or English because the interpretive problems—fallible human instrumentation being used by fallible human beings—that have been compounded by relying on man-made machines and one's own intellectual-emotional-physical-spiritual capabilities are simply aggravated by using language to communicate.

Further, language itself is not automatically "objective" but is loaded with problems that stem from, in part, the interplay between denotation and connotation. Language is layered. It is virtually impossible to get away from multiple meanings. Language, too, is a product of human beings and as such it is heir to human folly and error. This folly is perpetuated when we suggest that by being prescriptive about language usage we can "purify" it. Inconsistencies in grammar handbooks or usage handbooks attest to the slippery quality of language. And even when we attempt to narrow meaning we find that language dogs us with little laughs that mock our attempts to reach perfect specificity.

Stage 4. When an audience reads or hears the results of this interpretive process, its members add to the results given whatever level of understanding they bring to the message; each member of the audience understands or interprets the message differently.³ One member of the audience is confused by the terminology being used, so the message is difficult to understand. Another member of the audience has a pressing financial obligation that keeps interfering with the message. Another member of the audience has a cold; her misery is so great that the bout between the handkerchief and the text yields no winner. In fact, in all of these cases the message is changed demonstrably by the audience. But allow for perfect conditions, no sickness, no preoccupations, no environmental distortions of any sort. What happens? Fallible human beings still interact with the message given their intellectual-emotional-physical-spiritual capabilities. And they interact with language as the medium, given all of its inherent problems with the struggle between denotation and connotation.

And even these four stages do not tell the whole story, for each interpreter I have cited bases that interpretation on assumptions that are either explicit (realized as assumptions by the interpreter, though held, perhaps, as inalienable truths) or implicit (not identified as assumptions on a conscious level but, nevertheless, used to interpret data). Therefore, a priori issues enter even before we get to Stage 1; builders of precision instrumentation root their skills in scientific knowledge. In fact, builders of precision instrumentation test their products with equipment made by other builders of precision instrumentation. Thus, the process of interpretation can be seen as a cyclical process that is always based upon assumptions about the nature of reality, always based on some faith principle that produces a margin of interpretive stage. Therefore, this slight margin of interpretive variance that we might want to dismiss as statistically insignificant should not be taken for granted.

Does this complicated interpretive problem lead to a hopeless relativism where epistemological and ontological issues are limited to individual realities? It could, no doubt; we could lead our students to the slough of despond. But I prefer to press this problem just far enough to demonstrate the commonality of this interpretive problem and the necessity of using language in such a way that we attempt continually to approach perfect understanding.

But we are not done yet. This problem is more complicated still. When we juxtapose these two issues—the need to use language precisely and the problems of interpretation—we can begin to see that a scientific viewpoint is only one (not the only) viewpoint of reality. And we are naively elitist and extremely boring (a word students can identify with) if we assume that any one discipline offers a final word on knowledge. Rather, we can begin to show students the need to appreciate the different perspectives of various disciplines so as human beings we understand the need for humility when our research spawns a "new" theory or theorem that takes the breath from our peers. In this sense, teaching technical writing is teaching an appreciation for all knowledge that is based upon a realization that any one discipline's knowledge is partial knowledge that can be augmented by other partial knowledge. And all knowledge is based on some postulates, some faith principle.

But what has all this got to do with teaching technical writing? If teaching technical writing is the art of teaching students how to recognize and successfully complete forms, all this appears to be an unnecessary intrusion into the technical writing classroom. But writing technical documents is not a fill-in-the-blank activity.

Technical writers produce a variety of works that claim to be based on facts. Yet "facts" must be narrowly defined according to one's method of fact-finding, and pragmatic issues (Should we build this nuclear plant at this location?) are not settled only on the basis of one set of facts, but are generally settled on the basis of what these facts mean in a larger context, that is, how they are interpreted given a variety of viewpoints. And this recognition calls for a whole array of what might be considered extraneous factors in the eyes of those prone to defend a "pure" analytical method of fact finding. Put in different terms, issues are settled—technical documents are composed and interpreted—by human beings who read and understand given their particular interests, physical conditions, emotional states, and so on.

If technical writing is approached as I have outlined it here in its barest form, teachers of technical writing will have the opportunity to have a tremendous impact on the technological community. Future technocrats (I use the term lovingly) will be exposed to a way of thinking that will cause them to recognize the sloppiness inherent in all disciplines and reconsider the need to appreciate language as an elusive yet powerful means to influence audiences. In fact, the act of using language precisely is in itself a rhetorical device that establishes identification with an audience.

My experience as a teacher of technical writing suggests that students in the sciences can be extremely perceptive, eager to learn, and quite bright. These students appreciate the opportunity to improve their writing skills, which suggests that they see the value of improving what may be already fairly good writing skills and further suggests that these writing skills will help put them in administrative positions in their respective fields of study. However, these same students often resent the opportunity to study poetry or labor over interpretive issues in the literature classroom. So, we generally cannot challenge these bright students by exposing them to literary concerns when they see no rationale for the study of literature. Rather, we can influence them by appealing to them on grounds that they already believe are quite solid—the need to learn how to be good technical writers.

In fact, I go so far as to say that English departments have an obligation actively to proselytize these students by encouraging them to take technical writing as an integral part of their college programs. We may never be able to "reach" these students in the traditional English classroom, but we have a marvelous opportunity to reach them in a technical writing classroom. The very title Technical Writing tempts them. Once in the class, they are in a position to be influenced towards clear and informative communication, whether in "the sciences" or in the arts. However, I do not want to be misunderstood as saying that technical writing is a panacea. There is no guarantee that students will be "converted." But if we neglect this opportunity to convert them by either teaching technical writing as a methods course or assigning technical writing a closet position in the elitist rooms filled with literary works, we will have abdicated an opportunity to show how vital language is to all sorts of human activities. Worse, we will have thrown away a unique opportunity to narrow the traditional gap between "objective" sciences and "subjective" arts, with mutual benefits to both parties.

Notes

¹ I am grateful to Professor Donald Gregory of the University of Nebraska-Lincoln for his helpful criticism of drafts of the present manuscript.

² Cf. Robert Hays, "What is Technical Writing"; W. Earl Britton, "What is Technical Writing? A Redefinition"; and Edmund P. Dandridge, Jr., "Notes Toward a Definition of Technical Writing" in The Teaching of Technical Writing, eds. Donald A. Cunningham and Herman A. Estrin (NCTE: Urbana, Illinois, 1975), pp. 3-20. For a classroom exercise one could use to demonstrate the need for this broad definition of technical writing, see Bruce W. Speck, "Precision in Language Usage," Exercise Exchange 28 (1983): 41-43.

³ Cf. Kenneth L. Pike, "Language as Particle, Wave and Field," in Selected Writings, ed. Ruth M. Brend (Mouton: Paris, 1972), pp. 129-143 for a different view of the four stage process I have outlined. See also Richard E. Young, Alton L. Becker and Kenneth L. Pike, Rhetoric: Discovery and Change (New York: Harcourt Brace Jovanovich, Inc., 1970), *passim*.

Reader: Essays in Reader-Oriented Theory, Criticism, and Pedagogy

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A CASE FOR TEACHING TECHNICAL WRITING IN THE HIGH SCHOOL

Dennis M. Walsh

Now a university level teacher of technical writing and English methods, I was once a high school administrator and English teacher. For some time I have considered the effectiveness of teaching technical writing as a high school subject—particularly in terms of solving some crucial problems such as student interest and audience. Research into the matter indicated to me what I had already suspected: high school teachers do not know enough about the "world of work" in regard to technical writing, and college teachers of technical writing are not apprised of the special problems and goals of teaching English in the public high school. The conclusion of my thinking and research, after I have presented a report to the work of several Boise, Idaho instructors is that I wish to make a case for a technical writing elective in high school. First, I will illuminate the general area of my inquiry.

"Why Teach Composition?" asks J. N. Hook (here with W. H. Evans),¹ our foremost secondary English methods authority for several decades. Hook has been well regarded partly, I suppose, because he approaches the answers to each problem in a carefully researched, modest and inductive manner. In answering the above question, he refers to a recent statement by the NCTE as well as to statements by many others. The following summary of Hook's remarks (pp. 324-331) is intended to represent current wisdom and expert speculation in the field, not definitive statement.

We should teach composition at the high school level for reasons that have no immediate practical aspect—chiefly to help students realize their fullest human potentials, to encourage them to become as human as possible. This is self-fulfillment but also much more. Writing should awaken students to the possibilities of language, to critical thinking, to ethical possibility, to an enlarged world, with fewer prejudices and unquestioned conventions.

Some other more practical reasons to teach composition are the need we all have to comprehend the notion of integrity in speaking and writing, partly so we can control what the media do to us. Students need to come to terms with overt and covert censorship and propaganda as well as the psychological impact of the arts. Moreover, those (most people) who do not write belletristically—such as cat fanciers and business people—deserve to have the skills to produce sound prose and to read prose critically in their areas of interest.

Finally, writing skills are important in very practical social and professional situations. Parents, friends, and lovers need to understand what we are saying in print as well as in speech. We may not get job interviews if we cannot write, and promotions are increasingly unlikely without writing skills. I suspect I have done some damage to Hook's integrity by summarizing his section so briefly. Yet, it is apparent he cannot be accused of narrowness or effectness in his student-centered attempt to discover why we should teach writing in the high school.

Mary La Roche, while she introduces a fresh perspective in her rhetoric-or subject-centered approach to teaching technical writing to tenth graders, reveals in a recent

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recent article² a certain lack of depth, breadth, and experience. La Roche leaves herself open to substantial criticism since she assumes throughout her article that teaching high school students is virtually the same as teaching college students of composition.

Armed with Sawyer's technical writing syllabus designed for University of Michigan School of Engineering seniors, and fortified by Wayne Booth's notions about teaching college freshman writing, La Roche marched sturdily into the Detroit public schools to demonstrate how writing should be taught to technically oriented tenth graders. What is valuable about La Roche's experiment is that it almost certainly had some success with a particular group of students in terms of creating enthusiasm and thus likely produced "more correct and more sophisticated writing" than if the same students had been engaged wholly in belletristic writing (p. 75). Moreover, I have little doubt that the "honest communication" of La Roche's students in itself created "energy, enthusiasm, and conviction" in them. However, we know little about the general education and writing backgrounds of these students, and certainly we cannot assume, as La Roche seems to, that these same students could be inspired only by technical writing and not by other sorts of honest communication.

What is wrongheaded about La Roche's program is that it does not consider wider needs of high school students, particularly the technically oriented with whom she is most concerned. First, though she waffles a good deal, La Roche seems to be suggesting that technical writing should mostly replace literacy writing for students who are esprits geometres (mathematical, technical) instead of esprits fins (aesthetically oriented, intuitive). The French, quoted by La Roche, is from Pascal. Last night on the TV news I saw and heard Special Envoy Habib (degree in forestry), former Secretary of State Haig (military science), and present Secretary of State Schultz (industrial economics) speak on matters of national and international interest, matters requiring technical knowledge and rhetorical competence—but matters also requiring a deep sense of other peoples and cultures, of self, of language, of ethical possibilities, of censorship and propaganda. persons in such places cannot be merely esprits geometres, narrow technocrats and "good soldiers," although it has been argued for over a century that most Americans are philistines of one kind or another and was recently that the current federal administration is particularly so. Certainly formal schooling alone does not produce a John F. Kennedy, but would we want our Kennedys to pursue only technical studies through high school and college?

Second, La Roche is misled in assuming that high school English teachers teach only literature and belletristic writing. Students in fact often perform many other tasks such as examining propaganda and advertisements, or prejudiced thinking and writing in newspaper editorials. They often write researched articles on such subjects as the smail darter or the Ford-Pinto controversy. Moreover, some teachers, instead of replacing mainstream English programs by technical writing courses, are designing practical writing units within the regular curriculum. Or, as I suggest here, perhaps a senior level technical writing elective, to be offered in addition to mainstream English, that is humanistic in both pedagogy and cultural emphasis will fulfill the broader needs of technically oriented high schoolers.

Several final ironies about La Roche's article are that Pascal, to whom she refers importantly, held in highest esteem those, like himself, who possessed both mathematical and intuitive abilities. Surely he would not accept La Roche's approach which does not encourage the development of intuitive abilities even when a youngster does not seem to have that sort of aptitude at a particular time in his/her life. Another irony is that had La Roche been educated by her own prescription, she would likely not have read Pascal at all. Or, I suspect, had she read him more accurately, she would prescribe differently. Better yet, she might be content with simple description of her teaching experience.

Cheryl and Joe Gratton, Boise, Idaho, public high school English teachers, presented a workshop last spring at our regional NCTE conference entitled "Career Vocational Unit." Their program, as direct and simple as the title, seems to me a combination of career guidance, reality therapy, and technical (or pre-/quasi-technical) writing. In this three week unit, their students research a particular job and subsequently write a report including title page, table of contents, footnotes, and bibliography. They also write a resume and letter of job application, fill out an application form, and present a speech on the researched job. The Grattons initially require their students to complete several grade-level interest and vocational inventories (Stang-Campbell, Job-O, and some of their own) and present students with computer print-outs detailing their interests and abilities. Students then hear talks by local people accomplished in their vocations and avocations, including architects, musicians, and policemen. Many students are exposed to the army vocational inventory which is done by the Army itself. Moreover, the Grattons keep a library of files on occupations containing, for example, the Occupational Outlook Handbook printed by the U. S. Department of Labor.

To conclude my remarks about the Grattans' unit, I am here reporting what seems to me a valuable contribution that goes beyond the usual disembodied career search to take up decision making in the "real world" and to ask students to write about themselves and that world. While most of what these students do is not technical writing as a college instructor would view the matter, it is indeed closely tied and is best called vocational or practical writing rather than technical writing.

My hypothetical, senior elective course, designed to be taught in one semester, is a composite of business and technical writing, American studies, and media/advertising study. Three class periods a week would focus on writing concerns, while in the other two classes students would examine media/advertising and imaginative literature with a business or technology theme. The following is a course description:

Introduction to Professional Writing investigates subject matter relevant to the interests and professional goals of the beginning technical writer. Students will master the basic usages of written English, including grammar, punctuation, spelling, basic sentence patterns, and appropriate diction. Paragraphing and longer organizational problems will be treated in relation to the conventions of professional writing. Students will write descriptions, clarifications, process analyses, cause and effect arguments, and resumes and job letters. In all, we will approach our subject matter mindful of the system of values and beliefs implicit or explicit in the daily activities of scientists, technicians, engineers, or managers in business and industry. Further, we will examine these values and beliefs as they appear in contemporary media/advertising and also in literacy works.

To sum up briefly, students would perform writing tasks similar to the simpler assignments of a college class but would also examine the larger context of American culture. Technical training would thus be combined with liberal education.

Initially, the writing text for such a course could be one of the more basic ones already in existence such as Pearsall and Cunningham's How to Write for the world of Work (Holt) or Kakonis and Scalley's Writing in an Age of Technology (Macmillan).

Ultimately, I would wish to write my own text embracing the entire course. Assignments could be based on those in Kakonis with supplementary reading or assignments added. Thus, the third unit assignment could read:

Unit III: Classification

Principles and uses in writing

Study of examples

Writing Assignment: classify TV commercials on the basis of the shows in which they appear.

Readings: "End of the Line for Job mechanizaiton" (from Automoton) in Kakonis and Scalley, pp. 134-47.

A later unit on comparison might be ore technical:

Comparison as a way of perceiving

Uses and forms of expression in writing discourse

Study of examples

Writing Assignment: a before and after description of a technological device that makes daily life fuller or more pleasant.

Readings: Ray Bradbury's Farenheit 451 and "How Cable Television May Change Our Lives" (from The Futurist), in K & S, pp. 256-58.

The examples mentioned in the units would be positive and negative examples taken mostly from student writings (of an earlier class) but also from actual professional writings. It is effective to examine the negative examples on an overhead projector transparency and have students take the positive examples away with them on ditto to examine at home (and later in class) and to use as writing models.

"Grammar" study would be of the sort I have described thoroughly in another article. Better termed usage study, it does not contain actual grammar lessons of the traditional kind—including lecture, exercises, and rote memorization—but instead is confined to close examination of sentence groups written by the class being taught. The (usually) faulty sentences are placed on an overhead projector transparency and shown to the class. The class is asked to rewrite the sentences so they function more effectively in their context. Individuals who make the changes write them in an abbreviated way on the chalkboard. Finally, all sentences improved to the satisfaction of the class, the techer erases the chalkboard. Students are left with only the original faulty sentences and must rewrite them and solve the problems0—not necessarily in the way the class as a whole has determined. Students are graded on these sentence lifts," which are conducted on the days graded writings are turned back to students, and all sentences are taken from those writings. No one but the author and techer knows from whence comes a sentence. Teh sentence lift is designed to allow students to improve in teh area of basic usage—but to do so in a non-threatening, discovery forum. Little emphasis is placed on memorization of rules but much on practicla rules of thumb and appropriateness. The final step in this cycle of writing and sentence lift is revision of individual papers either in or out of class.

The literature portion of my elective could be constructed from a large set of essays, plays, poems, stories, and novels which focus on the American Dream, the frontier, the profit motive, technological change. Some examples of essays are Benjamin Frnklin's "The Way to Wealth," Dos Passos' "The House of Morgan," Don Fabun's "The Corporation as a creative Environment," "The Energy Crisis and Its Meaning for American Culture" (The Christian century). Examples of poems are MacLeish's "Empire Builders," Frost's "A Lone Striker," and Jon Swan's "The Report." Arthur Miller's plays, for example, are effective in this context as are novels such as Alger's Ragged Dick, Bradbury's Farenheit 451, Vonnegut's Slaughter

House Five, and Fitzgerald's The Great Gatsby. At times the writing strand of the course could be joined directly to the literature strand by having students adopt the persona of a fictional character. For instance, class members could be Matt Zaleski, assistant auto plant manager in Arthur Hailey's Wheels, who must write a complete report to the plant manager on a serious accident in the plant. Students are required to gather facts from the novel, and thus read the novel more closely; they must consider all of the personal and "political" circumstances involved in the plant situation, and must write a detailed, factual, cause and effect report.

The pedagogy for such a course ought to be humane and non-threatening. I would avoid what La Roche advocates: "The threat of public embarrassment" (p. 73). High school students these days seldom accept a bullying pedagogy. Thus, students ought to write about subjects of personal interest to them, they ought not be embarrassed publicly, they should be allowed the opportunity to re-write materials for credit, and they should be encouraged to discuss openly their views about writing, ethical dilemmas, culture and technology without fear of ridicule. Writing models should not generally be the students' own but should be taken from other classes, and sentence lift material ought to be presented anonymously. Probably formal oral reports should be avoided as they also create embarrassment. The pedagogy, in short, ought to be inductive and discovery-oriented, the teacher's method a combination of short, impromptu lecture, both directed and undirected discussion, and individual assistance.

Before concluding I wish to state my agreement with such writers as Mel Orth⁴ that a technical writing course should involve seeking "empathy with another human being," seeking knowledge for its own sake, writing "tasteful and polished sentences and paragraphs," emphasizing "economy, directness, and clarity," acquiring the ability to "discriminate, to think logically, to put things in perspective." These are all humanistic goals which are congruent with the ends and means of the high school elective I have described.

My main intention here has been to present a case for a hypothetical technical writing elective for high school seniors, one which meets the larger needs of technology oriented students. In short, I insist that our scientists and businessmen be fulfilled, integrated, conscious human beings as well as effective technicians—at least inasmuch as that purpose can be achieved in the schools.



UPCOMING N C T E MEETINGS

- October 4-6 Southwest Regional Conference for English Teachers, Albuquerque, New Mexico.
- November 16-21 74th Annual Convention of NCTE, Detroit, Michigan.
- March 21-23 CCCC Spring Convention, Minneapolis, Minnesota.
- March 28-30 Fourth Annual Spring Conference of NCTE, Houston, Texas.
- November 22-27 DIAMOND JUBILEE: 75th Annual Convention of NCTE, Philadelphia, Pennsylvania.

NOTES

1. J. N. Hook and W. H. Evans, The Teaching of High school English, Fifth Edition (John Wiley and Sons, 1982), p. 324.
2. Mary G. La Roche, "Technical writing as an Alternate Rhetoric for Composition Courses," The Technical Writing Teacher, Vol. VIII, No. 3, Spring, 1981, pp. 73-75.
3. See my "Teaching 'Grammar': Next round" in the Idaho English Journal, Fall, 1981, pp. 26-31.
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TECHNICAL WRITING APPROACH CAN IMPROVE STUDENT PROSE

Can high school students benefit from technical writing courses? Yes, say the authors of Teaching Technical Writing in the Secondary School, a new booklet in the Theory and Research into Practice Series. But because most high school teachers lack preparation for teaching technical writing, they neglect this potentially effective approach.

Bertie E. Fearing of East Carolina University and Jo Allen of Oklahoma State University contend that the real-life context of technical writing instruction helps students become interested in why written messages succeed or fail. They show how making a game of noticing and doctoring lumpish prose can turn the pursuit of lucid writing into a habit.

The authors cite useful findings and comments from leaders in the field. They explain how a unit in technical writing can incorporate lessons in style, appropriate diction, and economy of language. They suggest ways to teach the use of emphasis and paragraphing to enhance one's prose, and note that properly taught, even the subtleties of handling parallelisms are within high school writers' reach.

In the section on practice, Fearing and Allen outline classroom activities to help students find, critique, and correct problems in prose samples. They suggest prewriting activities for analyzing audience, clarifying the purpose of a piece of writing, and organizing content. The authors offer sample assignments for practice in various forms of technical writing and supply a bibliography.

Teaching Technical Writing in the Secondary School is published by the ERIC Clearinghouse on Reading and Communication Skills and the National Council of Teachers of English. (36 pages, paperbound. Price: \$6.00; NCTE members, \$4.75. Available from NCTE, Urbana, Illinois. Stock No. 52953)

VISUAL LITERACY COMES OF AGE
Hilary Taylor Holbrook

"Something there is in our intellectual
culture that doesn't like a picture."
Calvin Skaggs

"Back to basics" advocates who dismiss visual media courses as frivolous would not view kindly the idea that literacy in the visual media of television, film, and advertising is no less important to a solid education than are reading and writing. But even critics of curricula not grounded solely in the classic works of literature or the fundamentals of grammar and composition must acknowledge that the visual media, so pervasive in society as to be inescapable, are an influential force that shapes perceptions of reality, history, and society. In the face of such influence it would seem prudent to rethink curricula in terms of an appropriately broader literacy. Within this broader literacy, students should be made aware of the scope and power of these media, and learn to be discriminating consumers if they are not to be manipulated or deceived (Wagschal, ED 239 833; Gnizak and Girshman, CS 007 238).

Although the "basics" trend is an effort to abate verbal illiteracy, verbal and visual literacy are, to a high degree, inseparable. According to Skaggs, "One cannot increase visual literacy without enriching verbal literacy. It may also be argued that we can no longer achieve verbal literacy among our youth without attempting systematically to achieve a higher level of visual literacy."

English appears to be the discipline best equipped to impart visual literacy. Its primary concern has been transmission of general culture, of which the visual media are a major vehicle. It is also primarily responsible for teaching skills of critical analysis—elements of theme, plot, character, and style that are present in a sitcom, movie, or advertisement, as much as in a novel. This paper presents a case for visual literacy in the English curriculum, supported by materials from the ERIC system, and looks at activities and methods for developing such literacy.

Television: Wasteland or Frontier?

Foster observes that students have three choices regarding television viewing: don't watch it at all, watch all they want, or watch it moderately with critical understanding and appreciation. With compelling arguments he dismisses the first two as unrealistic and dangerous, respectively. Among the mind boggling statistics he cites are the 95 percent (75 million) of households with television sets, more than have refrigerators, stoves, or indoor plumbing. He also notes television's effect on behavior, value systems, and perceptions of reality, effects that are immediate and dramatic, or subtle and cumulative over a lifetime. That leaves choice three.

Hilary Taylor Holbrook is a staff member of the ERIC Clearinghouse on Reading and Communication Skills. This article is one of a number of ERIC/RCS reports, designed to summarize recent research in an area of interest to English teachers, synthesizing materials from the ERIC database.

One of television's least obvious advantages, according to Levinson [CS 504 288] is that the ability to discern television's strengths and weaknesses is teachable. Furthermore, this skill is self-perpetuating with every new program or commercial.

Among the discussion questions suggested by Harold Foster are the following:

—Does television create violence in our society or does it reflect the violence already present?

—Does television news accurately reflect the world?

—Can too much viewing harm an individual?

Foster also proposes exploring television myths such as the detective show (might makes right), the western (good and evil were more discernable in the "old days"), or the sociology of sport.

Film—Larger Than Life

Presumably because "movies are for entertainment" (Where does that leave literature?), film studies have been a conspicuous target for curriculum critics; but like it or not, the movies are here to stay. The demise of the neighborhood theatre at the hands of cable television and the economy notwithstanding, it is the personal isolation and "larger than life" quality of the big screen experience that lend films their attraction and their persuasive qualities. Gnizak and Girshman (CS 007 238) describe a film curriculum designed for grades nine and ten that uses both English teachers and media specialists. The course challenges the notion that when one watches a movie one does not have to think. Students complete composition, reading comprehension, and drama/poetry exercises, as well as develop a script that they subsequently film.

Another way to use film study as a stimulus rather than an end in itself is to focus on literary works that have been made into movies, examining which of the two the students find better (students may be surprised to discover that very often the book is better than the film), how the two differed, and how having first seen the movie influenced the way they read the story and vice versa.

Foster also suggests that awareness of the structural elements of film—editing, movement, composition, camera angle, color, lighting, and sound as they are used to manipulate emotional response—is a significant factor in visual literacy.

Advertising: The Hardest Sell

To serve as an example of the overwhelming influence that advertising exerts on social patterns, Ewen (ED 137 804) cites advertising as the tool with which manufacturing and industry have altered the character of daily living from productive to consumptive. Pressure from consumer advertising during the 1950s and 1960s created the "feminine ideal" of the housewife who remained at home, preparing prepackaged meals in a kitchen filled with state-of-the-art appliances and using all the newest health and beauty products to maintain youth and beauty for her husband. Such advertising has also been indicted as a catalyst for the national obsession with being thin.

Studies by Moore and others (ED 219 753; ED 165 182) on the effects of advertising and media consumer behavior on adolescents indicate that susceptibility to the persuasion of advertising is positively related to the amount of mass media use and

the amount of communication with family and friends about matters of consumption (the higher the media use and the more discussion, the lower the susceptibility), and negatively correlated to age and socioeconomic status (the younger the consumer and the lower the socioeconomic status, the higher the susceptibility). The researchers also found that retention of advertising information was positively related to age, amount of communication with family and friends about consumerism, and socioeconomic status.

Bennett [ED 159 728] brings attention to two forms of advertising other than product advertising that warrant study: corporate-sponsored image and ideology advertising (the propagation of ideas and controversial social issues in a manner that supports the interests of the sponsor while downgrading the sponsor's opponents, such as power company interests in nuclear power.)

To counter the effects of various kinds of advertising, teachers have developed a variety of effective classroom practices.

Braden and Walker (ED 212 294) refer to advertising as a most effective symbiotic use of words and visuals. "Trademarks and corporate logos have become part of our visual vocabulary. The pages of almost any slick magazine will reveal visual-verbal combinations that turn the verbal metaphor into a visualized attention getter."

The persuasive language used in such advertising can be an excellent tool for teaching rhetoric, according to Stone (ED 166 701). Since advertising demonstrates creative and admirable as well as corrupted uses of the English language, it can serve as the core of a composition unit, to teach students variety in diction, connotations, sentence structure, openings, use of detail, economy of expression, the sound of language, awareness of the reinforcement that words and pictures give each other, and persuasion through indirection. (Why is "No brand cleans better than Brand X" not the same as "Brand X cleans better than any other brand"?)

Vertin (ED 190 424) describes an individualized unit for study in advertising, developed for the junior high level. The teacher's guide and student booklet are designed to teach students to identify the different sources and types of advertisements, to recognize the main purposes of advertisements, and to analyze the purchasing powers behind the basic advertisement.

A section of Webb's paper on consumer education activities (ED 214 847) examines common advertising gimmicks, and provides related activities for secondary students, including finding examples of advertising ploys such as "weasel words," the "scientific claim," or "superstar endorsement."

Finally, a junior and senior high school media literacy curriculum guide (Bhakuni, et al., ED 211 973), written by participants in a summer workshop on media literacy, focuses primarily on manipulation in advertising. The four advertising lessons cover (1) advertising as manipulation, (2) the power of television commercials, (3) propaganda techniques used in media advertising, and (4) how advertisements persuade through words. The guide also lists goals for media literacy, includes a television viewing questionnaire, and outlines several media projects.

A VISUAL CURRICULUM

Clearly, the need for media literacy exists, as do the materials for incorporating such instruction into the English curriculum without sacrificing more "fundamental" components. Burbank and Pett survey eight successful visual literacy programs from the United States, Canada, England, and Australia. The experience of one such program indicated that visual literacy is within the financial capabilities of school systems and, if properly carried out, will be supported locally. In many instances, small pilot efforts in one classroom or one school have grown into major projects involving teachers throughout the school system. The ERIC system contains other curriculum materials dealing with television, advertising, and film study, which can be found by using the thesaurus descriptors VISUAL LITERACY, ADVERTISING, FILM STUDY, AND TELEVISION.

If the "basics" are those minimal skills necessary to function as an adult in society, then it follows that the ability to interpret information intelligently in a society that is becoming increasingly visual is not only basic, but also essential.

Media

The Commission on Media (David A. England, Director) reported a *modest renaissance in interest in media study and use in English*—although the interest is mainly among theorists, researchers, and a handful of practitioners. According to one member, "New research in areas like semiotics, structuralism, cognitive psychology, and visual thinking have suggested new directions for the use of media in English education. . . . Some teachers . . . are exploring the perceptual and cognitive structures underlying all media, including writing." Another saw "older" strategies like use of film being redefined, and newer ones like computer-assisted instruction being developed in ways that stress the "fundamental interrelatedness" of media and various subject matter areas.

The commission recognized problems, though. "A classroom teacher noted that *'noncontextual use of media'* still dominates in many schools. Films are presented purely as entertainment, television programs used to fill a class period, media presentations made *'without tie-in with a cohesive curriculum.'*" Another member saw a trend towards *'ignoring media-related competencies and objectives in teacher certification programs'*, partly because control of teacher preparation is moving from schools of education to state departments of education." Additionally, a trend toward *competency testing for teachers* is working against support for media instruction, because media competencies are less testable than traditional academic competencies.

Commission members raised numerous issues related to *computers and English*. One worried about computers in the curriculum in light of the "sad track record" of radio, film, and TV. The predictable pattern of new media in the curriculum is one of overstated initial predictions; varied applications with

few verifiable results; equipment anxiety among teachers; and ultimately, limited use of new equipment and techniques in specific sites. To avoid this, educators must clarify objectives with relation to the computer and keep them clearly in mind.

Another commission member noted overemphasis on the computer as a "deliverer of instruction" and called for *greater use of the computer as a tool*; that is, students need to know how to access data bases, define search terms, evaluate information, estimate costs for data searches, and the like. He also warned that teachers in other disciplines are *defining what "computer literacy" is*—and "too often, that turns out to mean programming for everyone."

Two members commented on the *effects of new technologies on thinking skills*. One suggested that word-based adventure games on computers might encourage the forming of mental images; that the sequential logic of computer programming might help develop linear thinking; and that both of these effects differ from those of television. Another hypothesized two different—and contrary—effects of TV on children's mental visualization. TV might be weakening image-forming powers by providing images, or it might be habituating children to visual thinking, thereby encouraging it.

Questions of *"Telecommunication ethics"* were raised by a member concerned about providing students with awareness of the effects of new technologies on our behavior. Another held that *attitude-shaping by commercial television* remains an important educational problem, stating that "we must go beyond teaching students good taste and intelligent viewing habits." Students must learn "to cope with television's hidden message, to recognize . . . destructive values."

—Charles Suhor
Director, ERIC/RCS

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El-Hi Education Must Combat "TV Curriculum," Postman Says

Neil Postman, writing in the January *Phi Delta Kappan*, calls the schools the only major defense our culture has against "the television curriculum," which he regards as a threat to human intellectual development. He asserts that the arrival of TV is no less challenging for western culture than two earlier watershed changes, from oral tradition to alphabetic writing and from handwritten manuscript to the printing press. Too many educators, he says, are either shrugging their shoulders helplessly or denying that "the TV curriculum" is a problem.

Postman sees "a fundamental antagonism between TV and language." He observes that "people watch television. They don't read it," and that unlike words, a stream of pictures can't convey concepts, abstractions, or ideas; it can only offer examples. Visual stimulation, in fact, interferes with mental processing of complex language, he says. While the printed page leads the fluent reader "away from the form of its symbols toward their meaning," TV leads the viewer toward symbols, away from their meaning.

Postman contends "that an education dominated by concrete, dynamic visual images must weaken the abstracting powers of youths and erode their abilities... in all modes of conceptual thinking, particularly language and mathematics." He worries that commercial TV's world of picture stories calling up

visceral rather than critical responses makes the school world "of exposition, in which we confront statement and counterstatement... irritating to students and renders them increasingly incapable of attending to it for long periods of time."

The "easy" TV curriculum, developing no skills, requiring no sequential learning, "yields no intellectual or emotional growth" and "mocks the ideas of deferred gratification, self-discipline, and intellectual achievement, without which education is mere entertainment," Postman charges. TV, he says, teaches students to reject any message that is not entertaining, thus making teaching doubly difficult. Postman argues that by presenting a world of unconnected events, TV teaches a disturbing view of reality. Its axioms: "that history is bunk, that hierarchies are arbitrary, that problems have no antecedents, that the future is not worth dwelling upon,..." in short, "nihilism."

Faced with this fragmenting influence, Postman says, the most important aim of the schools should be "to provide young people with a sense of purpose, of meaning, and of the interconnectedness of what they learn." He favors Jacob Brownowsky's *Ascent of Man* theme for education, stressing the origins, growth, and interconnectedness of knowledge as an antidote to the "largely incoherent" messages of the TV curriculum.

USING TELEVISION IN TEACHING THE LANGUAGE ARTS

Samuel A. Perez

One cannot dispute the fact that American children spend many hours in front of a television set while growing into adulthood. Using the 1982 Neilsen Report, Postman (1983) estimates that, between ages 6 and 18, an American child spends about 16,000 hours watching television. He notes that this same child will spend only about 13,000 hours in school.

As could be expected, many parents and teachers are troubled by this so-called television problem—the growing concern over not only how much television children watch, but what children watch on TV. The real problem, however, may have little to do with the frequency or nature of television viewing. The television problem may have far more to do with how children watch TV. Do children view television just as an entertainment medium? Do they think beforehand what they expect to learn from a television program? What do they look for in a television program? And, of particular concern to teachers, do children relate television viewing to school or classroom learning experiences?

Since TV is an integral part of a child's life and exposes the child to a variety of information on many subjects through newscasts, documentaries, talk shows, dramas, situation-comedies, cartoons, and even commercials, what are teachers doing to incorporate its drawing power into the instructional program? Are teachers using the information provided by TV to stimulate learning, particularly in the language arts classroom?

This article will suggest ways teachers can use the variety and appeal of television to develop language arts skills in the classroom. Using television as a resource for classroom learning can have the carryover effect of helping children get the most out of their unassigned television viewing. The TV-based activities described in this article will be divided into before viewing, during viewing, after viewing, and follow-up activities.

Before Viewing

The preparation prior to viewing an assigned television program can be done by discussing with students what they will view. In viewing a drama, for example, introduce the subject of the show and discuss what students already know about the topic. Before a talk show, discuss the persons who will be interviewed, what students might learn from them, and what questions the students would like to ask. For a documentary program, have students look up information to compare with that presented in the program. If viewing a news program, ask students to remember what happened the day before so they can try to predict what will be on the news. Another before viewing activity would be to divide the class into three groups to watch the broadcasts of three different stations or networks in order to compare how each presents the same news stories.

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After Viewing

After students have watched an assigned television program, teachers can initiate class discussions by simply asking students to retell what they remember about the program. If students watched a dramatic program, have them name the characters, describe the events of the plot or explain any possible theme or message in the show. Follow the retelling with specific questions about the program. Questions about what was in the program or why students either liked or did not like the program would be useful discussion starters. Students can also discuss the commercials shown during the program. The following questions can be asked: "What was the commercial saying the product does?" "Did the commercial give any proof or evidence to back up its claims, and if so, what?" "How would you go about learning about a product?" "If you keep seeing a commercial about a product again and again, does it mean it is a good product?" or "Does an entertaining commercial mean the particular product is a good one?"

The interest generated by class discussions of assigned television viewing may lead students to want to keep a notebook for reviews of programs they watch. The reviews can be short—a half page to a page—and can include the name of the program, time and day shown, type, main characters, plot by listing the major events in proper sequence, theme or message, new vocabulary words and why the program was good or bad. Older students can include the answers to more sophisticated questions, such as "What was the turning point of the program?" "Did the characters change and if so, how?" or "How would you have improved the program?"

Follow-up Activities

The following activities can be used for enriching student understanding and enjoyment of viewing television. Encourage students to read paperback books that relate to their television viewing. TV tie-in books make it possible to lead students from the more literal escape of television to the more imaginative escape of reading. Having students make up stories based on scenes from television programs is another follow-up activity. Suggest students combine characters from different television programs to create stories for sharing with the class. Younger students can draw and color pictures of their stories and then dictate them to a teacher or parent to write down. Older students can write their TV-based stories. Other follow-up activities include writing letters to TV personalities to ask about their work and interests, re-creating alternate endings or resolutions to programs for role playing and writing sequels for dramatization in class.

For the educator, integrating television viewing into the language arts curriculum can be a catalyst for enriching traditional teaching resources. The TV-based activities described in this article can be a way of making language arts as stimulating and exciting as television viewing is in itself for many children.

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HOW ARE THE MEDIA INFLUENCING US?

The role of media in shaping our culture is not being acknowledged in our system of education. Such neglect means that too many Americans are growing up partly illiterate. This is a major concern of the NCTE Commission on Media, according to its director, David A. England of Louisiana State University.

"A good reader today should be a good reader of TV news as well as of important books," England said. "We keep thinking of print and electronics media as in competition. Actually they are complementary, and they should be approached that way in schools and colleges."

High school graduation requirements are now being raised, England pointed out. "But our definition of what is basic still reflects what was basic once, instead of on what is basic and will be basic in the next twenty years." Commission members said schools are still treating film, TV, and other nonprint media as entertainment only vaguely linked to the curriculum.

"The irony of this situation is all the more apparent in an election year, when the persuasive power of electronic news media and computerized attitude polling surrounds us," England said. All the same, neglect will continue, he believes, as long as teachers aren't given a coherent education in how to analyze and use media.

"The problem we face is how to influence those who decide what will really be taught in the schools, whether they be parents, school boards, legislators, or state departments of education," England said. Commissioners worry, he added, because "more and more power and control over how preparation of teachers is defined is being assumed by state departments of education" and taken out of the hands of colleges and professional subject-matter organizations.

"Because state teacher certification requirements don't call for media-related competencies," he noted, "teachers aren't taught much about what to do with media." The gap will persist so long as narrow, popular conceptions of "basics" and easily testable "competencies" dominate teacher certification, he said.

Educators trying to cope with the complex new question of making students computer literate will come up against similar obstacles and pressures, England said. "We don't know yet how computers in society will affect thinking or the ways we think about thinking. The commission recognizes the positive and revolutionary potential of computers in education. But educators have sometimes been notoriously responsive to bandwagon panaceas." Commissioners warned, he said, that "programming for everyone" would be pointless. They cautioned that programs for using computers in the English classroom must be based on adequate research and careful thought about educational objectives.

ENCOUNTERING "THE DAY AFTER" Ulrich H. Hardt

It is 3:38 p.m. A nuclear explosion over Kansas City. Flash follows flash across the sky. Blasts, fires, heat devastate the city and countryside. Men, women, and children disintegrate in split seconds in front of your eyes. Entire city blocks explode and vanish. For six non-narrated (certainly not silent) minutes you witness the fateful day of a horrible nuclear holocaust.

"We are not talking about Hiroshima anymore." Compared to this, "Hiroshima was peanuts."

Those few who manage to live through the catastrophic devastation must cope with the terrifying aftermath: radiation sickness, virulent epidemics, inadequate means to care for the sick and to dispose of the dead, limited food, water and medical supplies, outbreaks of violence and savagery.

Will the physical hardships compounded by the people's psychic numbness mean that they are only temporary survivors? Who else has survived the attack of over 300 nuclear missiles aimed at 32 targets in the U.S.?

These and many other questions are left with you after seeing ABC Television's Theatre presentation The Day After, to be shown on November 20, 1983, on prime time television, between 8:00 and 10:15 p.m.

The Making of the Film and Its Effects

The film has been in production three years, took 48 days to shoot, nine weeks to edit, and cost over \$7 million. It stars Jason Robards, a surgeon at Memorial General Hospital in Kansas City, and his wife, Georgann Johnson; Airman First Class William Allen Young, assigned to Minuteman missile silo; John Cullum, a dairy farmer, and his wife Bibi Besch, their oldest daughter Lori Lethin, about to be married to Jeff East; resident physician at University Hospital in Lawrence, Calvin Jung, and nurse JoBeth Williams, and a host of extras chosen from among the citizens of Lawrence, Kansas.

It was these citizens, incidentally, who, even after being a part of the making of the film, said they were nearly devastated by it when viewing it.

The film has received much advance publicity. ABC President Brandon Stoddard thinks it will have a bigger impact than any other program the network has ever shown, including Winds of War and Roots, and he "lives with that responsibility every day and most nights."

A most telling bit of information about the anticipated effects of the film is the fact that at the end of October ABC had not been able to attract any advertisers for the program, in spite of the promise of a huge viewing public.

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Other important hints at the expected impact of the presentation are the "ABC Viewpoint" and "Northwest Viewpoint" scheduled for 10:15-11:30 p.m. with Peter Jennings out of New York, and from 11:30-12:00 midnight with Rick Meyers in Portland the night of the showing of The Day After. Television stations throughout America will have psychiatrists, psychologists, theologians, radiation experts, civil defense and military authorities, as well as peace group activists standing by at the studios to handle the millions of calls ABC is expecting.

On October 26 I previewed The Day After along with six other educators of the Portland area. We had been invited to the screening by KATU because of our leadership positions, and because the local ABC station was genuinely interested in seeking our advice prior to the showing on November 20.

The group was unanimous in warning against the viewing of the film by anyone under age fifteen or sixteen. However, I know that a number of our younger students will watch the program, and we as teachers need to be prepared to deal with their fears and their feelings of hopelessness. It is for this reason this guide is presented in this volume of Oregon English.

Not Censorship

In no way should this article be interpreted as advocating censorship. OCTE will not condone it. However, neither are we reckless in our recommendations. What makes The Day After such a difficult film to watch is the desperate hopelessness and futility with which it ends. For that reason adult guidance is crucial.

But precisely because the movie so accurately portrays the destructive potential of nuclear war, it is important that as many American adults as possible view the film. Do watch the film, but do not watch it alone. Plan to view it with your family and invite a few friends and neighbors into your home. Then watch, listen, talk and think together about what each one of us can do to prevent "the day after" from becoming a reality.

What follows are ideas that should help us as teachers to deal with students who will have seen the film and who want to seek reassurance from us.

The Story

While citizens in and around Kansas City go about their daily routines, television and radio news reports focus on an escalating crisis in Germany. Both NATO and Soviet spokespersons protest military buildups in the area. The tensions increase on Friday when a blockade of land and air access routes to West Berlin is imposed.

Dr. Russell Oakes, a surgeon at Memorial General Hospital in Kansas City, listens to the news with growing concern. He and his wife Helen recall their anxiety during the Cuban Missile Crisis of 1962. Friday morning after surgery, he leaves for Lawrence, Kansas, 38 miles west of Kansas City, to teach a class at the University.

Airman First Class William McCoy is stationed at Whiteman Air Force Base in Sedalia, Missouri, and is assigned to a Minuteman missile silo at Sweetsage, 20 miles southeast of Kansas City. The site seems peaceful enough on Friday morning as Billy enters the area and waves to the Hendry family on the neighboring farm. That evening, however, he must say goodbye to his wife after the President of the United States orders all U.S. military personnel on a worldwide alert.

Jim Dahlberg, a dairy farmer, and his wife are looking forward to the wedding on Sunday of their oldest daughter Denise to Bruce, a student at the University of Kansas at Lawrence. Alarmed by Friday night's events, Jimm takes steps to prepare their cellar as a fallout shelter. His young son and daughter help him stock it with water and canned goods.

At the University Hospital in Lawrence, Sam, a resident physician, examines freshman students including Stephen Klein, a pre-med major from Joplin, Missouri. Nurse Bauer comforts a pregnant woman, Allison.

Later Stephen and other students learn from a television report that NATO and Soviet forces have invaded East and West Germany and are engaged in a confrontation. At the local barbershop, Joe Huxley, a professor, hopes that the conflict can be contained. He adds that the 150 missile sites in Missouri could be targets in a nuclear war.

These citizens' worst fears materialize when it is announced that nuclear weapons are being used by both sides in Europe. Radio bulletins over the Emergency Broadcast System now advise citizens to proceed to municipal shelters. At the stores, people panic and scramble for food and supplies.

In the U.S. Strategic Air Command's Airbourne Command Post, the order to launch American missiles is received. Procedures are followed in the underground silos.

Mrs. Hendry is at her bedroom window when a missile is launched. Dr. Oakes is on the crowded highway to Lawrence. Stephen, hitchhiking home to Joplin, is alone on a country road. Airman Billy McCoy arrives at the missile silo for duty only to discover that the weapon has been launched; he flees the scene with: "The war is over." The Dahlbergs gather in their basement shelter. At the university, Joe and the students watch the Minuteman missiles in the distance and realize the Russian missiles could arrive within 30 minutes.

In Kansas City, chaos reigns. People rush into public shelters as air raid sirens blare on the streets. At 3:38 in the afternoon, the nuclear explosions occur above the city.

Miraculously, the University Hospital in Lawrence still stands. It is the only place within 100 miles where the burned, injured and disoriented survivors can come for medical assistance. Dr. Oakes, having witnessed the destruction of Kansas City from afar, arrives and takes over duty with Sam, Nurse Bauer and others. In the Basic Sciences Building, Joe sets up a shortwave radio which becomes the only means of communication in the area.

After wandering in the radioactive fallout, and witnessing the charred remains of people and livestock, Stephen comes upon the Dahlberg farm and is allowed to enter their shelter. Billy joins hundreds of other victims on the road to Lawrence.

These individuals have managed to live through the initial devastation of a nuclear attack. Now they must cope with the terrifying aftermath. With the world they knew destroyed, can they survive? Is there an outside world left to help them?

Teachers' Role

Teachers in grades K-9 may have students who have seen The Day After. Be sensitive to a wide range of reactions, from quiet, subdued children to those who may

act out. At this age children primarily require the assurance and confidence that adults are in control and can keep them safe. Allow students to express their fears and provide reassurance.

Primary Grades

Children at this age are busy building wholesome attitudes towards themselves as growing organisms. In the early primary grades they comprehend death but without its finality; they view the possibility of a loved one's death in terms of the fear of separation rather than understanding the meaning of death. Second and third graders can begin to admit that they themselves will die someday in the distant future. Therefore, carefully listening to the words of primary children and accepting their feelings is the most important thing teachers can do; do not attempt a detailed explanation of death.

Primary children still cannot clearly distinguish between fantasy and reality. Help them see that play (movie) is different from real war because nobody is getting hurt or killed. Do not teach directly information about nuclear war; it is more important to help them learn to get along with their peers through conflict resolution and cooperative problem solving at this age. One of the difficulties is that students may hold literal meanings for abstract concepts like "arms build-up," and "power plants."

Children cannot think in long-term future orientation; they are concerned about tomorrow and their personal needs and cannot cope with concepts implying finality, such as "the end of everything." It is therefore important that we not expose them to overly intense adult emotions. Whatever our own feelings of anxiety and helplessness are, our role as teachers is one of reasoning and reassuring adults.

Intermediate Grades

Ann Shelton, Health Coordinator in the Portland Schools, makes these very succinct and helpful comments about students aged 9-12. They frequently are "extremely interested in facts, and they may ask direct information questions. Reference books can be helpful. Listen carefully to discussion of issues, and be prepared to introduce facts into the discussion and to correct misinformation or to state that we don't really know the answer to such-and-such at this time.

"Fourth to sixth graders may be rigidly justice oriented, perhaps outraged that some grown-ups may destroy their future. On the other hand, their principles may break down when strong personal interest is at stake. They may also display literal-mindedness, counting weapons to see who is ahead in the arms race, believing more is better.

"At this age children are often attracted to sensationalism. Help them find facts to de-sensationalize statements they have made, when appropriate. They may also be attracted to violence and conflict. Have them discuss a peaceable classroom, a peaceable neighborhood, a world they can help build."

We know that many of the youngsters in this age bracket perceive death as violent, given the fact that they will have witnessed 11,000 deaths on television by age 14. Seeing The Day After may have increased their fear of unavoidable death, and teachers need to be ready to respond with reassurance and caring. An excellent strategy would be to have them write stories or poems or draw pictures, thus allowing them to create reassuring fantasies.

Above all, they need reassurance that there will be a world for them to live in. Provide an optimistic view of their future.

Middle School and Junior High

For any of these students who may have seen The Day After, discussion will be crucially important. Teachers' ideas often are accepted as law, therefore it is important to give them accurate information and to model logical thinking. Discussions will help them sort out likely ideas from improbable ones. Accept their views but also give them new ideas to think about, especially if their own seem headed in unproductive directions.

Children aged 11-14 may make correct discoveries and handle certain formal operations, but their approach is cumbersome and they are not yet able to provide systematic and rigorous proof. Since peer relations are important at this age, others' opinions will carry social weight. Monitor this closely. Encourage them to collect many ideas and support them in wrestling with important issues in a safe and accepting classroom environment.

At age 14-15 adolescents are capable of formulating more elegant generalizations, advancing more inclusive laws, and providing spontaneously more systematic proof. Their reasoning becomes increasingly more abstract and shows a higher degree of mastery. This early adolescence is the time of developing ideals and intense loyalty; these youngsters are also unpredictable. Listen closely to their fears and concerns, help them clarify views, and encourage them to listen to each other and to parents. Through activities (avoid preaching at them) impress on them the fact that their actions and attitudes are helping to create the world they live in.

High School

Older adolescents are deciding who they are and what their roles in the community are. They are also concerned with their personal futures. Some will express a nihilistic view very similar to that seen in The Day After. Since we will all be blown away anyway, what does it matter?

Try to gain a sense of control in class discussion of appropriate individual and group actions that can be taken. Show that many adults are deeply committed to ensuring a future for us all. Help the students to become involved and to learn to work with others to form responsible opinions and make rational decisions. A list of agencies and addresses is given at the end of this article that individuals and classes may wish to contact.

Since peer relations are still extremely important at this age, being accepted is also. Many students will repeat views heard at home as their own. Set a tone of tolerance for all opinions. It may be helpful to allow students to express their thoughts in privacy. Journaling may best meet that need.

Discussions

In an early scene in The Day After, Dr. Oakes and his daughter visit an art museum. Looking at a painting of a Chinese landscape she explains: "Sometimes it's hard to know how to experience a Chinese landscape because the artist doesn't tell you where you are watching from. You know why? Because he wants you to be in the landscape, a part of it, not out here looking at it."

Similarly, viewers of The Day After should move beyond "looking at" the scenes of the movie to "being a part of them" through discussion and possible action. The

following are a few suggestions high school teachers may find useful to guide discussions and other activities:

- Should developments in the escalating military situation in Germany have convinced citizens in Kansas City that war was imminent? How much attention do you pay to military conflicts overseas? When was the last time you followed the details of an international crisis—in Korea, Beirut, Central America, Grenada?
- At what point in the two days prior to the attack would you have abandoned business-as-usual and taken a protective course of action for your family? What would you have done?
- Some characters in the movie refuse at first to take the emergency seriously. How do you explain their action?
- In the event of a nuclear war between major powers, would any place in the world be safe? Do you understand people who say that they would rather not survive a nuclear attack?
- Share your reactions to the scenes of the launching of the Minuteman missiles from their underground silos. What adjectives would you use? Were you surprised by your response.
- Billy deserts the army with: "The war is over" when he sees the empty missile silos. If you were in his situation, would you follow orders and remain on alert?
- The pregnant woman tells Dr. Oakes? "We knew the score. We all knew about bombs. We knew all about fallout. We knew this could happen for 40 years. Nobody was interested." Dr. Oakes does not argue with her. Would you?
- Cite incidents in the story that demonstrate the will to survive. At one point Allison asks Dr. Oakes to explain why he works so hard at the hospital. How do you account for the tireless efforts of the medical staff?
- Of all the institutions which presently constitute American society, which one(s) would be best suited to handle a postwar society with its manifold problems? Which groups take control in The Day After?
- A food line turns into an angry mob when supplies run out. Have you ever been in a group that became a mob? How did you behave? Should survivors of The Day After who commit violent acts be judged by traditional standards of morality?
- Do you believe that in spite of everything people are basically good at heart? What evidence do you see for this in The Day After?
- How do you interpret the birth of the baby? A sign of hope?
- What problems are depicted in The Day After that no people in history have faced before? Do you agree with those who point to the recovery of Hiroshima and Nagasaki as a signal of hope, or would you maintain that a full-scale nuclear confrontation today would not have a functioning "outside world" to provide medical assistance and psychological support for survivors?

- Discuss this quote from James Baldwin in the context of the last scene of the film: "The moment we cease to hold each other, the moment we break faith with one another, the sea engulfs us and the light goes out."
- Does your community have a civil defense plan? What are its key provisions?
- The Day After ends with the following statement: "It is hoped that the images of this film will inspire the nations of this earth, their people and leaders, to find the means to avert the fateful day." It is important to remember that the future is not some place we are going to but something we are creating every day. Can we create a future free from the threat of nuclear war? Research the various strategies which have been proposed by citizens and their leaders to prevent the use of nuclear weapons. Discuss how you individually or as a group can participate in the ongoing efforts to help make the world safe and peaceful.
- In addition to having an effective deterrence, what else can be done? Arguably, the most effective way to reduce the threat of nuclear war is to change the U.S./Soviet relationships so that neither superpower would consider using nuclear weapons against the other. What could they do to begin this process of change?
- How can arms control agreements between the superpowers be reached.
- Can we stop the spread of nuclear weapons to other countries?
- Would improving international means of settling disputes before they become wars be a possibility?
- How can the U.S. and Soviet leaders improve communications, especially during a crisis?
- Can you think of historical examples where U.S. relations with another country have changed dramatically?
- What can we do to help our government prevent nuclear war? Can you think of recent examples where citizen action has helped to change government policy?
- How can you do the following things most effectively in your community: Learn more about foreign policy and nuclear war issues? Educate others about the seriousness of the situation? Ask questions and voice your concerns to elected officials? Assist an organization that is working to prevent nuclear war?

Organizations and Persons to Contact:

American Friends Service Committee
2249 E. Burnside
Portland, OR 97214
230-9427/230-0346

Ground Zero
806 - 15th Street N.W., Suite 421
Washington, D.C. 20005
(202)638-7402

Educators for Social Responsibility
639 Massachusetts Ave.
Cambridge, MA 02139
(617) 492-1764

A STRATEGY FOR GUIDING MORAL DISCUSSIONS

	Present the Dilemma	Read/view/listen to a dilemma Define terms Clarify facts State the dilemma
Reflect on action Choose an action State reason for choice Indicate choice	Create a Division on Action	
	Organize a Small Group Discussion	State reasons Rank reasons Justify ranking Write questions
In terms of: Consequences Previous dilemmas Analogous dilemmas	Guide a Class Discussion	In terms of probe questions which: Clarify Raise specific issues Raise inter-issues Examine other roles Examine universal consequences
In class	Bring the Discussion to a Close	Beyond Class
Summarize reasons Reflect on actions Choose an action State reasons for choice		Interview others Write a dilemma story Find an example Write a solution Write a solution

Taken from: Bayer, Barry K. "Conducting Moral Discussions in the Classroom," Social Education, April 1976, p. 199.

AUDIO-VISUAL AND THE BASIC WRITER

Sallyanne H. Fitzgerald

"I don't know why they didn't revolt," laughed a colleague at a recent literature conference. She explained that her freshman composition class studied Measure for Measure, Middlemarch, Sense and Sensibility, and Mansfield Park. Her rationale for using these with a freshman class of predominantly engineering students was to "give them content for their papers." Like many instructors, she feels that freshmen lack experience and, therefore, subjects to use for essays.

In many traditional approaches to composition, a reader provides the content. Such texts as Patterns of Exposition, Writer's world, Popular writing in America, and Short Model essays provide writing samples to generate student ideas on the same or similar topics. Another recent approach to providing content through texts, the casebook, like Gene Krupa's Situational Writing,¹ provides a topic or situation and an audience for student writers.

Disagreeing somewhat with these ideas is James Moffett in his recent article, "Writing, Inner Speech, and Mediation."² Moffett suggests that teachers enable students to tap their inner speech through meditation because inner speech can provide essay content.

All of these attempts attack the issue of content by trying to answer the legitimate question: How do instructors give freshmen students subjects on which to write so that these students can move from the expressive to the transactional prose mentioned by James Britton?³ This is not only a problem with regular freshman composition students but also with remedial English students who lack both skills and content. Almost every theorist mentions the basic writer's difficulty with finding a topic. For instance, Mina Shaughnessy remarks, "They (Basic Writers) seldom...know what they ought to—or want to—write about."⁴

In all of these attempts to provide content, teachers are ignoring one particular appropriate area especially for remedial students. This is the use of audio-visual. In recent years, audio-visual materials have been attacked variously as a "cop-out" by the lazy teacher, as too much preparation to obtain and use effectively, and also as a destructive force much like television. Certainly, all of these criticisms are valid in isolated cases. Some lazy teachers do use audio-visual because they don't want to or can't teach. True, audio-visual equipment is expensive and difficult to obtain when many schools consider it superfluous, and if a teacher obtains the equipment, it does take time and effort to use the materials properly. Finally, materials which are not carefully previewed and intelligently used can be as disastrous for students as Saturday morning cartoons.

But, balanced against these negative aspects stand definite advantages especially in using audio-visual materials to provide content in a basic writing class. First, basic writers are frequently poor readers. Although the average reading level was 10-11 grade,⁵ in my classes the last two years, some of the students read below sixth grade level. Because they have difficulty reading, basic students frequently avoid it; therefore, the traditional reader or even the casebook and certainly a Victorian novel, will not offer content when it is not read. I am not suggesting that audio-visual should replace reading, but instead that it will give poor readers a chance to obtain content for their essays in another way as well as through reading. Secondly, my basic students are frequently very verbal. They are accustomed

to talking and to listening; so audio-visual builds on the knowledge they already have. thus, they are able to learn in one way Piaget⁶ suggests we learn: by fitting what is new to what we already know. Also, anyone, observing the students with radios and earphones jogging or studying on campus, knows these students are candidates for a successful audio-visual approach. Finally, audio-visual has the definite advantage of providing another way to approach poor learners. Basic students rarely can maintain interest in a class which is always the same. this is partly due to their short attention span, but it also results from the difficulty they experience if they are primarily oral people caught in a written medium. Elementary school teachers know that they must "reach" students in a variety of ways because some children learn through sight; some, through sound; some, through a combination. Basic writers are also like this, and audio-visual gives the instructor a chance to employ a method to reach the sound/sight people in an additional way.

Given to all these advantages one wonders why more college composition instructors do not turn to audio-visual for their basic writers. the greatest stumbling blocks apparently are planning ahead and knowing what to use. Planning is the key to successful audio-visual use because equipment must be ordered or provided by the instructor. if this hurdle is surmounted, then the rest is relatively easy.

To obtain the materials to use with the equipment, an instructor has three options. He may order from his own school (through an audio-visual department and/or through the English department). Or, he can make his own—if he masters the technique. Finally, there are such sources as the local library and free or minimum fee companies.

All of this is fine if the instructor knows what kinds of materials to use. Two of the easiest and most effective to use with basic writers are tapes and slides. they are inexpensive, easy to obtain and set up, and appropriate to most writing assignments.

Two kinds of tapes are useful with the basic student. the first is an instructor's taped comments of each essay the student writes. The instructor can recommend content ideas for future essays or for re-writes.⁸ Bruce Hawkinson⁷ and Harold Hodgkinson with William Walter and Robert Coover⁸ provide excellent advice on the kinds of tapes. The second type is the tape an instructor makes from another source with his own cassette player. He can tape current recordings for comparison and contrast, television exercise routines for process analysis, or sports events from radio for detail and description. If chosen carefully, these tapes can allow students a chance to display their talents while also providing essay content. For example, a football player can pick out important terms to explain to the class from a recording of a game, and a music major can mention the instruments used in a popular song. After listening to these tapes, the class discusses what was presented, using a worksheet for notes, then they compose a journal entry followed by an essay. Clearly, this is one answer to the need for content in a basic writer's essays.

Another solution to the basic writer's content source is slides. An instructor may use ones he has made himself or professional ones. Particularly effective are slides of art works.⁹ This year, we used slides with basic writers from both sources. I created a slide-tape show on essay introductions using slides and a tape I made. The second source was art slides: paintings of groups of women. We showed Grant Woods' Daughters of the Revolution and Picasso's Young Ladies of Avignon. Besides providing an interesting comparison and contrast, the painting slides allowed students in art or humanities courses to share the knowledge they were gaining in those courses with other basic writers. Like the painting slides, effective personal shots of vacation sights, or people, or even of family cars could serve as content for papers of comparison and contrast. Of course, slides work well for exercises in using

specific details and making generalizations. After using a worksheet during class discussion to examine such things as color, shapes, and background, students make a journal entry on the slides and from this entry, they construct an essay.

Obviously, one answer to the problem of providing content for the basic writer's essay is the use of audio-visual aids, especially tapes and slides. Such materials allow the slow readers to move beyond the written word and to use the verbal medium which they are so familiar with. These break the monotony of the class as well as touch those students who may be exclusively sight or sound people. The difficulties of using the medium are outweighed by the advantages which accrue to basic writers who are approached by audio-visual materials.

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BUDDY WRITING, PARAGRAPH SKELETONS, AND OVERHEAD TRANSPARENCIES: STRATEGIES FOR TEACHING PARAGRAPH WRITING

Gene Fazio, Judy Pearce, and Gwen Rowley

Too many composition teachers work harder than their students. Some even edit everything students write, an obviously unbearable burden. Yet, students do need to learn to write effectively. Three strategies, among others, that help resolve this dilemma are buddy writing that teams two students in a writing group, partially completed paragraphs in skeleton form that invite original completions, and overhead transparencies that allow a teacher to project student writings. Each strategy can be used separately or together as part of an in-class writing lesson. This article will explain how these strategies reduce the burden on the composition teacher and make students more responsible for their own learning by giving them opportunities for learning more than they are taught directly.

Buddy Writing—Students Learn From Each Other

Traditional in-class writing assignments generally require students to plan, write, and revise in isolation. When two students are paired in a "buddy system," they can generate ideas through interaction with a partner who functions both as a sieve to sift thoughts and as a backboard against which to bounce ideas. This interaction stimulates the ideal learning environment by giving each student a critical commentator during the important planning process. While partners compose together, they continue to read and edit their joint composition.

There is another advantage to buddy writing besides having students help and learn from each other in a classroom setting. As they work on composing a sentence, paragraph, or essay, students in each group realize that others also fumble for a word or rewrite a sentence several times before its relationship to the previous sentence is clear. Those who write regularly are familiar with the frustrations of writing, while inexperienced writers do not have the opportunity to see how difficult writing is for all writers. **When students work in a buddy system, they can see that the problems of composition are part of the process itself and NOT the result of insufficiency in themselves.**

Skeleton Structures—Students Learn To Write Topic Sentences On Their Own

No teacher can learn for students. How many times have we heard a composition teacher say, "I told them once. I told them twice. I told them a hundred times, and still they didn't get it right." Teaching with preplanned lectures can fail because this method does not meet individual needs, nor does it involve students personally. The use of topic sentence skeletons makes students central to what they are going to learn while still providing systematic and planned learning experiences. Note the following example:

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Topic Sentence Skeleton:

One problem with _____ is that _____.

As can be seen, every student in the class can think up a different topic. One might have "television newscasts," "letters to the editor," or "circulating handbills." Sharing the differences from student to student becomes a fascinating activity. Here is a completed skeleton to show how it might go.

Completed Skeleton:

One problem with television newscasts is that they present superficial reports of daily events.

Once satisfied with the content of their topic sentences, students can concentrate on revising and editing the sentence itself. Note the following example:

One problem with television newscasts is that they present superficial reports of daily events.

—becomes—

Television newscasts present superficial reports of daily events.

Students can write extensively on a particular subject when they have set it in motion with a cogent topic sentence.

Paragraph Skeletons—Students Get Their Writing Started And Learn Paragraph Organization

When a student works alone, a paragraph skeleton can reduce "blank page panic" that comes from not knowing what to say. For students in a buddy system, paragraph skeletons can become guides that help partners with divergent thoughts decide where to begin. As with topic sentence skeletons, paragraph skeletons act as a base for generating and organizing ideas. That is, a well-constructed paragraph skeleton, which has words or phrases at the beginning of each sentence, not only helps students generate content, but also can guide students through the process of ordering their ideas and relieve the teacher of those tasks. Students learn a system of paragraph organization as they write rather than having this skill imposed by the instructor before they do actual writing.

The teacher can combine the strategies of buddy writing and paragraph skeletons by starting students with a paragraph skeleton that includes an assigned topic sentence. Note the following example:

Enjoying Television

One reason many people enjoy watching television is that TV shows give them a view into the world of fantasy. For example, on ABC, the show _____. One of its last telecasts featured _____. In fact, _____. All in all, _____.

Once students have completed their writing, they compare it to a model. Here is a completed composition developed from this skeleton:

Enjoying Television

One reason many people enjoy watching television is that TV shows give them a view into the world of fantasy. For example, on ABC, the show "Love Boat" creates an atmosphere of love and starry nights at sea. One of its telecasts featured three couples who fell happily in love between Los Angeles and Mazatlan. In fact, one couple even had a storybook wedding when the boat docked in Puerto Vallarta. All in all, watching television is one way to escape day-to-day doldrums.

After students have successfully completed several of these paragraph skeletons, they are then ready to work with more open paragraph skeletons that allow a topic of their choice. Students then become responsible for writing more of the paragraph's content and are thus led toward independent composition. In the following example, students can write different paragraphs with the same skeleton.

_____ (title)

One reason many people _____ is that _____. For example, _____. One _____. In fact, _____. All in all, _____.

In subsequent activities, students receive sequential instruction when they work with more complex skeletons. Ultimately, students can learn to be better writers through their own comparisons without the help of skeletons and become more independent in their growth as writers. It is important to note that students can modify paragraph skeletons with open topics. The purpose is to guide students, not to freeze them.

Of course, there is some artificiality when working with paragraph skeletons as there is when working with topic sentence skeletons. A paragraph with a word or phrase at the beginning of each sentence that indicates a definite time or space order is obviously not sophisticated writing which has more subtle or even implied organization. Yet, how do we take our students from where they are and get them to this point? Do we instruct them as if they do not know anything and teach them, step by step, how to do it? Joseph Comprone suggests that "the traditional pedagogical assumptions are rapidly becoming suspect: one cannot teach writing by . . . having students learn skills one by one as if they could be expected to magically coalesce at some final examination."¹ Skeletons allow students to do what they are already able to do—develop their ideas when not forced to deal with form and content simultaneously. The use of skeletons also avoids cumbersome rules, confusing verbal instruction, and extrinsic motivation which may turn some students into self-conscious stutterers of syntax. Through this interactive experience with paragraph skeletons, students learn paragraph organization on their own. The artificiality resulting from using a skeleton can be handled very easily during revision.

Overhead Transparencies—Students Get Individualized Instruction

Instead of the teacher always having the burdensome task of reviewing each student's writing out of class, all work is put on the overhead for all to see during the class period. This method allows a teacher to teach more while working less. Instead of writing lengthy notes on student papers, an instructor can cover the same ground by giving short verbal explanations. Of course, the teacher can edit the students' writings after class and discuss them at the next class meeting. Then, the teacher can use the overhead so that the whole class, rather than just the author of a particular

composition, can learn from a teacher's editing efforts. Student privacy may be respected by omitting student names on the transparencies.

With the whole class focused on a single transparency, a product of one of their own, skills can be efficiently taught when a deficiency is apparent. For example, students can understand the use of a connective if it is their own writing that is being edited by the insertion of a connective. The teacher thus avoids the tedious process of motivating and convincing students that they need to know what is being taught. Naturally, positive comments about a particular "partner composition" provides further motivation as well as appropriate examples for teaching word choice, clarity, and variety.

Reviewing these in-class writings through the use of an overhead projector has other advantages. Students have the opportunity to critique numerous pieces of writing from their own buddy group and to be exposed to a variety of ways of fulfilling the same assignment. Also, students like to see their writing and their efforts rewarded by the attention of an entire class. Class comments often add great motivation to edit and polish. No one feels the stigma of errors when names are not put on the writings. Next, students' work receives immediate attention from the teacher. If there are any problems, the teacher is there to help.

Students also learn on their own and discover for themselves by comparing their writing to paragraphs under review. They see what they might have written. For example, one buddy group may notice that their writing lacks good specific examples while another group may notice that a certain organizational pattern could have been used to organize the ideas in their paragraph. Each student is meeting individual needs by drawing individual insights from comparing. Rather than doing exhaustive planning outside of class, the teacher using this technique can effectively meet individual needs during the actual class period.

By using student compositions as springboards for instruction, the teacher can focus on needs of students rather than on a textbook-derived curriculum; skill instruction is in a student-centered, need-based sequence. The teacher begins where the student is, not where the textbook begins. Teaching sequences of skills unrelated to an immediate need in a specific composition on the transparency is less than helpful. As Jeannette Veatch, an authority on individualized instruction, points out, "The hope is that when the students need it, they will remember it. There is little research to support this hope. It is probably more true that when they need it, they will have forgotten it."² This tendency to forget can be overcome when the instructor uses student-initiated editing to teach effective writing skills. Neil Postman, well-known co-author of *Teaching As A Subversive Activity*, observes that in order to make learning meaningful, "lessons must develop from the responses of students."³ This activity, then, can develop students' ability to critically evaluate and edit their own writing as well as that of others.

Philosophical Rationale For Using Paragraph Skeletons

Two keys to successful instruction are teacher planning and student involvement. Without teacher planning, there is usually a lack of order and direction in the classroom. Learning can become accidental in such an environment. Without the personal involvement of students, there are motivation problems. Veatch points out:

No man can learn for another. That is why personal involvement is crucial. No involvement, no learning. There are only two ways to go. One way is

through the pupil's own self. The second way, and the only other way, to involve a pupil in his own learning is to talk him into it, to persuade him that he should. This is the object of my criticism, as it is the source of confusion about teaching. If a teacher must teach by persuasion rather than through self-realizing and self-actualizing practices, he must follow these instructional guidelines:

'Do as I do.'

'Say as I say.'

'Do not think for yourself.'

'Salivate when I tell you to.'⁴

When students complete paragraph skeletons, they are automatically and intrinsically involved because it is their own writing which is used for instruction. Their language is the content of the lesson. Students are also discovering and learning from within themselves without the teacher's obvious help and without the often confusing explanations or rules.

It is important to note that using paragraph skeletons is a method of direct instruction that does not simply present information. The paragraph skeletons do direct students to shape their writing into different patterns of organization. However, once a skeleton has been completed, students can look at their own writing and recognize time order, space order, general-to-specific order, and so on. Students are not told what to do; they learn from their own experiences. Thus, the paragraph skeletons elicit student writing that can be used to help students learn a variety of different patterns of organization. Consequently, students are learning specific writing skills even though the teacher is not constantly presenting information.

Teacher planning and structured activities must not predetermine content or eliminate personal ideas and choices of students. Sesame Street has definite planning and systematic instruction, but it does not have any personal involvement. Veatch makes a strong point about Sesame Street's pre-determined content:

It [Sesame Street] gives out predetermined knowledge over which no child has any choice (except not looking). Yet, I don't see how television can teach differently, because the techniques of interaction are technically impossible. A child can react . . . but he cannot interact with Gordon or anyone else. Thus, Sesame street is the best way to present knowledge that some adult has decided is important. But in the classroom, where human beings are face to face, these cheerleading, commercially-oriented types of instruction are wrong. they are desperately, devastatingly, academically WRONG.⁵

As we have been emphasizing, our suggested technique of using skeletons requires student involvement at a highly personal level. This is a far cry from educational television or workbook drill exercises which both inhibit and limit personal involvement.

This method of teaching composition has planning, system, and order because students can learn from a particular pattern of organization when working with a preplanned paragraph skeleton. It is important to note that our intention is not that students produce paragraphs identical in form to models or mimic modes of discourse. Rather, our purpose is to help students learn the process of organizing their ideas in a multiplicity of modes.

Although paragraph skeletons make students shape their writing in definite ways, students are not learning forms; they use forms to learn patterns of organization, and, once students have learned a pattern of organization, they can create their own forms spontaneously and naturally. For example, if a skeleton sets up chronological order with the words first, next, and so on at the beginning of sentences, students will be able to put their ideas. Into a time sequence. these transition words at the beginning of each sentences, students will be able to put their ideas into a time sequence. these transition words at the beginning of each sentence help students generate appropriate content. Later, transition words can be discarded during revising just as a scaffold of a building can be torn down once the structure can stand by itself. of course, students may choose to utilize their own transition words that put their ideas into a time order pattern of organization.

We are submitting that lessons are best learned when they are based on the students' own language. In fact, the word education comes from the Latin word educere which means to lead out. Accordingly, Veatch points out that

Learning comes from the inside out. That is what I mean by the centrifugal force of learning. anyone who has tried to feed an infant when he does not want to eat that, knows that forced feeding does not work. Yet most teaching now going on in American schools is of the forced-feeding variety.

This "outside-in" learning, externally imposed by the instructor, is what Veatch refers to as forced-feeding instruction which discourages student interaction with the learning process.

One method of facilitating inside-out learning is a structured learning situation which incorporates each student's ideas and choices as an intrinsic component of the writing process. For example, when some students are unable to grasp the concept of a topic sentence and to incorporate that concept into the writing process, some instructors would suggest that this difficulty with topic sentences is an indication that they are of little value in writing. the problem, however, is one of instructional design rather than a supposed non-utility of one component of the writing process. The teacher must structure an assignment in such a way that, by completing it, students begin to internalize the necessary writing skills.

Whether for a topic sentence or a paragraph, a skeleton provides students with a specific method for organizing ideas while still allowing students to generate and invent their own content. Indeed, the skeleton allows students to be creative by providing the means for them to use what they already know about both mechanics and content. The students then are able to use their personal experiences to understand the lesson. thus, skeletons make the students themselves central to what they are going to learn while still providing systematic and planned learning experiences.

We have shown how students work with a sequence of paragraph skeletons that require students to write more and more of the paragraph's content. This learning sequence can be compared to a mother teaching her child how to dress himself. Most mothers begin by putting the shirt on the child and letting him fasten the last button. Each time his shirt is put on, the child learns how to do more of the dressing process on his own. Even though this lesson has step-by-step progressions, it is still holistic because each dressing episode ends with a finished product and progress by requiring students do more and more on their own.

Some teachers may still be concerned that paragraph skeletons stifle creativity. However, the biggest stiffler of creative composition for many students is indecision. they have so many thoughts going through their heads that often they know not where to begin. They need direction. The pattern provides students with a tool for both generating ideas, and sifting and selecting appropriate content. Beginning a sentence with for example limits composing options, but at the same time it generates appropriate content. Learning paragraph patterns through the use of paragraph skeleton completions liberates students from indecision and enables them to move toward the goal of being comfortable writers.

Using Assigned Topic Sentences With or Without Paragraph Skeletons

Teachers may also use assigned topic sentences with paragraph skeletons. The question may be raised as to how this method really differs from the practice of many teachers who take the topic sentence from an excellent paragraph, give it to students, tell them to add their own sentences, and then ask them to compare their paragraphs to the model paragraph. This method presents a problem because student paragraphs may be developed in any number of ways and thus may be very difficult to compare with another. However, with our method when students work with an assigned topic sentence and paragraph skeleton, both their paragraph and the model will be organized similarly. Because the students' paragraphs and the model will have the same topic sentence and the same transition words, students will be able to make valid comparisons with a similarly organized model.

Revise comes from a Latin word meaning re-see. With this comparison, students are helped to resee their writing. they can decide what they liked and did not like in their writing and make appropriate changes.

Conclusion

Through classroom strategies of using buddy systems, paragraph skeletons, and transparencies we have presented the argument that students can learn more than they are taught directly. Students do need instruction in organizing and structuring their thoughts, but other methods of teaching, such as lecturing and worksheets do not as effectively involve students in developing their own skills. when students complete paragraph skeletons with their own ideas, they are automatically and intrinsically involved in their writing. The skeletons themselves are hollow; it is the energy and authentic thinking of students that can make these skeletons come to live.

Activities with paragraph skeletons allow students to make discoveries about their own writing by themselves or with their partner. What students discover for themselves is more clearly and completely understood by them than information dictated by a textbook or classroom lecture. So, we submit that paragraph skeletons provide students quite simply with the means to learn to write paragraphs. Indeed, completing skeletons provides students with both practice and feedback necessary for learning writing by writing. One student summed up our feelings about these techniques when he said, "I never learned so much in such an easy way."

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THE OVERHEAD PROJECTOR: THAT MODEL-T WITH A LASER-OPTION

James Beck

While everyone else in education today streaks clackingly down the eight-lane superhighway of "computers in education," I merely pot slowly along a parallel county frontage road. Though I'm lo-tech, and dusty and jounced, I'm quite happy with my non-electronic electric machine. It's the overhead projector—upon a rolling table, a sun-bulb with wizard ways of quite literally illuminating, elucidating, enlightening key concepts in language arts in general—and in composition in particular. (And this includes the "New Comp" notions of process, stylistic choices, group collaboration on a text.) During years of teaching horse-and-buggy style via dull green blackboards, faded purple dittos, and cold black textbook print, I had plodded on, utterly overlooking certain lucid technical-stylistic tricks of the OHP—its unknown paces and ploys. Then, by stages, I realized how the OHP can "explode" a text in front of student eyes, by the teacher's annotating and altering it. My discoveries follow.

But is the OHP all that unappreciated? Secondary-level teachers may well be more dextrous with the instrument. Still, I haven't found my own discoveries discussed in the ERIC data bank or other educational literature. And, though I currently use the overhead at least once every single class hour (rolling my now-familiar "crash cart" through the corridors) I'm the only person of my 30-member college department to do so—yet. I don't claim the OHP makes a quantum-jump ahead of blackboard, handout, lecture—but it is a fine catalyst for instruction (perhaps much as, today, the word processor now dextrously slips ahead of the crankily plodding typewriter. . . .) Here, then, is how.

Most instructors do know that one can make a projectable transparency of any text written in carbon-based material (student papers; magazine clippings; typescripts; etc.). (A hint: first make a sharp black xerox copy of the text, and use that.) One places a sheet of transparent, heat-sensitive acetate, on top of the text (or xerox), and process both through a thermofax machine, whose heat is absorbed by the carbon-based printing, and then transferred to the acetate, which the heat darkens selectively; and voila, a transparency. We also know that the OHP's strengths are, traditionally, to focus classroom attention selectively; to permit the teacher to face the class; and to allow room lights to remain on during instruction.

But I've found more, for language arts. Specifically, I can then annotate (mark up) that text (or an "overlay" or second sheet), and also alter (add variant versions of it), all to literally and figuratively elucidate complex abstractions about composition, for better student awareness, appreciation, ability.

I had better get specific. Supposing I want to teach certain technical writing skills, with complex-enough component subparts:

"Specific Detailing" has eight components: core-examples; anecdotes; statistics; "3W" or exactly Who Where When; concrete sense-imagery; analogies—similes,

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metaphors; zooming-in for close observations; statistics, or quantification through numbers; and dialog or direct quotations instead of paraphrases.

Or: "Coherence and Emphasis" (in a paper already basically unified structurally) involves "highlighting" the main points by: (1) new paragraph for new point; (2) topic sentence which is (A) brief and (B) usually early in the paragraph; (3) use of keywords distilling the points; (4) repetitions, and transition words; and (5) parallelism among the topic sentences in the various paragraphs.

Complex-enough concepts to convey, let alone through scrawly blackboard, distant textbook example, droning lecture. Here's a capsule definition of how overhead projecting can help:

"The Projecting," and then 'working,' of a text, to illuminate the writing techniques within it. This working involves annotating (marking the text to spot the technique's components—e.g., statistics here, anecdotes there) and also altering (rewriting portions of the text). That altering can be for teaching correction (movement from "bad" to "good" versions—adding needed details about the inferior lunch counter), but also just for teaching judgment (movement from Version A to Version B—more imagery and analogies if it's a mood-piece, more statistics if a formal complaint).

Annotating is done either on the original transparency of the text, or on a second-transparency copy of the original text, or on an "overlay" (a transparency bare except for the markings, probably taped to one side of the original transparency, and folded down over it after discussion of the original, like a lid on a box). Annotating's done by:

—felt-tip pen in five colors; via highlighting whole words, or using symbols—underlining, highlighting, circling—or, by labelling terms in the margins.

—blocking out portions, then revealing later, after discussion, via lifting off the blacked-out sections, or using a second, unblocked transparency.

And altering's done by:

—revising the original text by adding, deleting, rearranging via erasable felt-tip pen, the instructor writing right on the transparency amid class discussion.

—supplying a second, already-altered text (showing the frank, unarguable improvements—or, judgment-call variations).

An example, please. Here's an original text of an actual student essay, verbatim as received. In terms of specific detailing, it's merely telling not showing—replete with "pseudo-details," not vivid enough. I first project this to the students:

A BAD TEACHER

Sitting in a lecture for one hour and fifteen minutes, when the professor isn't worth listening to is very tiresome. It's hard to sit there while he talks in a mono tone voice, as if he's reading off his notes. He has no contact with the class at all. It's very easy to daydream and stare off into space, which I do alot. And when I come back I hope I didn't miss any important points. With the clock straight ahead of me I always end up staring at it, and I count the minutes tick away. It also takes a long time

for him to make his point, which ends up in wasting class time, and becomes very irritating. My feeling is, that I would have a much better attitude toward the material if the professor presented the material better.

Well (and I wish I could overhead this stuff brightly to you right now, were not limited to black-on-white.) I then project an improved version, annotated for the specific types of specifics noted earlier. This illuminates them for students. Since the AEB doesn't print in color, I'll have to use the alternate mode of annotating by symbols, plus labelling. As follows: labelling core-instance, 3W, and dialog. Otherwise: Anecdotes—solid underlining . . . Statistics—wavy underlining . . . Sense imagery—broken underlining . . . Analogy—circled . . . Zoom-in to small details—boxed.

HOT AIR IN ROOM 1001 WINTHER 3W where

3W when

"12:30 to 1:45 P.M. Tuesday and Thursday is too dead an hour for a lullaby lecture by a boring professor. But look what happens:

3W who

"As Dr. Schmidt drones on in Stenology 211, he takes twenty minutes to expound on the three types of leadership which the textbook explained better anyhow.

Dialog

"Now the first type is the, uh, what is called the "charismatic" . . . 'No wonder my notes for a whole month are only four pages long. The clock hand jerks ahead to 12:41, cutting a tiny slice off of my sentence in detention. I daydream, thinking of autumn woods. . . I return to reality; it's 12:50 and he's still droning on: ' . . . and the third type is of course actually your "bureaucratic" . . . "Nose focussed on his tattered lecture notes, he has no contact with the class at all. No wonder no hands were raised for questions after the first week.

"It's only 1:10. Ahead of me, a football player shifts in his creaking seat, and sighs wearily. Nearby, Wanda is hiliting her accounting textbook with a skreeky yellow marker. At my right, Mark is doodling in his notebook margin. His pen creates a widening pool of surly dark blue, curling the paper.

No wonder last year's Student Survey ranked Schmidt 9th of 10 teachers in Stenology. And no wonder some students have bad attitudes about learning."

Thus can alteration and annotation separate and identify the components of a complex skill. Or skills: for another example, how to teach coherence and emphasis—the installing of fluent highlighting of thesis-and-points into an essay which is already basically well-structured? (And review wordiness, and specific detailing, too?) These complexities of the "five-paragraph theme" are subtle for many students. Here's how, via the OHP. Please try to first view the two texts below in their naked, unannotated state (again, my projector cord won't reach all the way from Wisconsin, so it's black-on-white time again). I give students a ditto of both texts, ask them, in both, "to double-underline the thesis, single-underline the main points, and [bracket] the specific examples of supporting detail, then write a summary of both."

EDUCATION

Education is a major part of our lives, because at one time or another we are all faced with school. At first we learn easier basics such as reading and writing and spelling. In high school we get more advanced studies. For certain reasons, high school education should be made more of a challenge.

Often, students who feel they don't have to pay attention in easy classes become bored with school. If classes were harder and involved more thinking, the student would have to try harder and wouldn't have time to be bored.

If high school classes are harder and more challenging, many of the students will be more interested in the subject. If the course is too easy, a lot of times the student goes off into a world of daydreaming and doesn't care to listen anymore. They can also develop the idea that they know it all and can pass the course without even paying attention.

By having classes more complex, it would take more effort and more time to cover and study the material. If it is a more time-consuming subject that involves a little extra thinking, it will give the kids something to do besides wandering around the campus or the streets, and it will keep them out of trouble. Also, if classes take a little extra work, this will help prepare the students for harder work in college and in future jobs.

For some reasons, high school education should be made more of a challenge. It would keep students from becoming bored with school, and it would keep them from going off into a world of daydreaming. Also, if more time was needed to learn the material, it would keep students from wandering around and getting into trouble, and it would teach them more responsibility and prepare them more for college life.

THREE REASONS FOR MORE CHALLENGE

Whether we like it or not, education is a major part of our lives. At first we learn the easier basics, then in high school we study more difficult subjects. I can see three reasons, however, why high school should be made even more of a challenge than it usually is.

First, challenge could remedy the common bad attitudes of boredom, daydreaming, and false over-confidence. Often the bored student in an easy class drifts off into a separate world. Challenging material could bring that student back, and also remove any unrealistic confidence he or she has that one can master anything. I know that getting my first "D" in tough Mr. Schmidt's Stenology class quiz, shook me up. I then buckled down and learned a lot about how to master difficult material. *anecdote*

Also, challenging courses could reduce delinquency, mischief, and the like. In fact, Vernon Phootkiss, vice-principal of Sedgewick Middle School, reports a 37% drop in noon-hour vandalism and littering since they started their program of self-paced, tutor-challenged quick-review sessions. *testimony, statistic*

Then, too, demanding material could surely prepare students for the hurdles of college-level courses and real-world jobs too. In fact, the Caesura-Lacuna study reports that 80% of college freshmen who were predicted to wash out of their first year, but who made it through, credit their success to rigorous high-school preparation. And I know that my cousin Tim, now a sous-chef at the local widget factory, feels that the "student-accountable" metalwork program which Mr. Offenbach started at Zenith High School, gave him a leg up ahead of the competition on the job. *authority, statistic, anecdote*

So, to correct slack attitudes, to reduce delinquency, and to prepare for college and jobs, I feel that our high school courses could use a little tightening up.

That done, I project the texts as annotated above—the left-hand one first, then the right-hand one. (By the way I may omit the boxed portions, of specific supporting detail, from the ditto of the right-hand version, and also black out the same on the projected version—revealing same only later. This is to keep students thinking through revelation.) Anyhow, I think the point becomes made vividly: "don't dilute or bury your points in wordiness—instead, emphasize them, in keywords and short topic sentences at the start of each paragraph." (I can then further felt-tip annotate the right-hand version for the traits of coherence-and-emphasis, of course.) Also, "use specific details to cinch your points." The left-hand version (again, a verbatim student product—contains zero grams of details.)

(Oh by the way—yes, in this example, my specifics are of course "fabricated," artificial additives. Here, they have to be. This essay's point is untenable. More challenge would in reality lead not to more application, but more apathy and alienation. Anne thus wrote an "Engfish" theme—a second-hand recital of unexamined platitudes, not a seasoned, involved statement of discovery from one's own experience. So we use this essay to review also the issue of "plastic vs. authentic" writing. . . .)

Thus the bonuses of the overhead—literally elucidating concepts—which I had overlooked as a technique for so long, and then hacked my way toward by this experimenting. (And which seems to aid our affirming what the writing act as such really is—a craft with identifiable component skills, evolved through the process of plural drafts, amid stylistic choices, and often collaborated upon by more than one author.)

Other, "housekeeping" bonuses of the light-machine emerge too. Its relationship to dittoed handouts is variable. It can replace them, when they're unavailable (a student paper "suddenly" to be projected to that class, to make a timely point), or unnecessary (the transparency can do it all), or even undesirable (you can flash an answer-key to an exercise or quiz via a transparency, and also a "sample perfect model" of an assignment yet to be done, for some guidance). Transparencies can also augment dittoed handouts; the handouts then act as lecture notes, also as worksheets (have students try a skill on the handout—e.g., "reduce wordiness," or "add detailing"—then show the transparency as key-answer and have students make corrections on their dittos in pen or pencil of another color).

The OHP also enables quick review-and-reinforcement of difficult concepts even weeks after they're first taught. If a class is still stumbling over structure, or whatever, one doesn't have to resort to their searching for their tattered dittoes, or buried textbook pages, or cryptic lecture-notes on the subject. One can simply call up the transparency which encapsulates the point—from one's 64K sized file on the rolling table's lower shelf—and flop it onto the screen for a quick review.

Thus far the intricate-enough stylistic tricks—the technological rhetoric—of the OHP, which I'd recommend, and do plunge in: it has to be lived and worked with for you to become conversant—I hope the above is an entry-guide. The OHP is addictive. Mainly for how it illuminates concepts thus. But also perhaps as change-of-pace from all-talk plus dusty-blackboard-scrrawl. It adds perhaps a bit of right-brain color-and-light. I hear the whirr of the projector's fan; feel the heat of the bulb on my hands as I card and scrabble the flexible transparency (a miracle, like glass itself is) up onto the machine, and feel the text's print burned or etched into it by heat (also a convenient mystery). I then hear and feel the felt-tip pen skreek over the surface, vividly technicoloring the vague abstractions in lime-green, cherry-red, walnut-brown, sky-blue and of course lemon-yellow: building a sort of stained-glass window to illuminate higher regions beyond it. . . .

APPENDIX: THREE OTHER COMPOSITION SKILLS ELUCIDATED BY THE O.H.P.:

- (1) WORDINESS—bloated prose whose six symptoms and cures are as follows:

DEADWOOD—just cut out "puffball" words such as category, aspect, situation, etc.
 DILUTED—distill rambling phrases down to one precise, crisp "key word"
 CHOPPY SIMPLE SENTENCES—combine them into fewer, more complex, ones
 IRRELEVANT material which simply doesn't relate—chop it out
 "EXPENDABLE" material which "sort of" relates—if not enriching, trim out
 REDUNDANT material, over-repeating the point—cut back on overexplanations

Here's a student's opening paragraph about "Babysitting," with the overhead transparency annotations which—after the class first reads the original—can help elucidate this sextet of symptoms of wordiness:

Babysitting can be an enjoyable experience. *# distill (= "key word")*
redundant - repetitive I've done a lot of babysitting, and on
 occasions I've found it to be quite pleasant. *# repetition* There is only one thing I dread and I am
 sure many other babysitters dread; and that is when there is a little baby in the house.
 No; it's not the crying that bothers me, many of the older kids throw crying tantrums,
 that I can live with. *# distill: to keyword (= "unpredictable")* You never know what to expect when it comes time to change a
 babies diaper.

And the final, tightened-up version, freer from flab:

As a veteran babysitter, the only thing that I (and probably other sitters too) find not only unpleasant but really dreadful, is a very young baby. And it's not the infant's tantrums, either. Rather, it's those unpredictable diapers.

Or: I find most of the babysitting I've done, to be generally enjoyable. The dreadful exception is, not an older kid with a tantrum, but a very small infant. It's not the crying, either. It's those unpredictable diapers.

(2) "OFFICIALESE," also called bureaucratic jargon or gobbledygook, has its dismal junior counterpart in the "Engfish" tone of many student themes—arthritic, wooden, hollow. Again, identifying six traits of this sluggish style can help students to identify and correct it. Common symptoms of officialese:

WORDINESS: repetitive, overelaborated pomposity, needs trimming to directness.

LEVEL OF DICTION: too high-hat formal, needs to be brought down a peg or two.

"NOUNISM": using too many names of things, needs more action verbs instead.

PASSIVE VOICE: impersonal, needs to be shifted to the active voice often.

TONE: also impersonal, "nobody-home," needs personal pronouns, "you"-approach.

GENERALITIES, ABSTRACTIONS: need to include vivid specific details, instances.

Again, the following annotated transparencies can show how the teacher can show the class—or record class discussion and suggestions—as follows:

(1) ^{"We discussed"} ~~"There was a discussion of the question of whether the elevation in the~~ ^{LOWER DICTION "raise"}
^{"raised"} ~~property-tax element should be commenced in the subsequent twelve-month period of~~ ^{"next year"}
^{LOWER DICTION} ~~time."~~ ^{DEADWOOD, ETC.}

("We discussed whether or not we should start raising the property tax next year.")

(2) ^S ~~"Photographic materials cannot be removed from this locality. However,~~ ^{PASSIVE by you "Archives"}
^{"we'll arrange"} ~~arrangements can be made for the photocopying of materials at the expense of the~~ ^{GENERAL}
^{PASSIVE → ACTIVE} ~~person who submits a request for this service."~~ ^{"to Xerox"} ^{NOUN → VERB} ^{"If you pay"}
^{GENERAL, ETC!}

("Sorry, you can't withdraw photos from the Archives Area—but, we'll xerox a copy for you [at your expense]. Just ask.")

(3) **PARALLELISM** is more than simply avoiding faulty parallelism within one sentence (as in "George likes fishing, he skis, and to dance"). Rather, if the writer casts related ideas into related stylistic forms, the reader can see the link between the ideas, among several sentences within paragraphs—and on a third level, among topic sentences between paragraphs. Further, parallelism can be strict, or relaxed—and can be employed via repeating parts of speech, or sentence structure, or alliteration, or even punctuation. Again, transparency annotations can vivify all this. To show parallelism's techniques and variabilities, here are two versions of a themelet:

Announcing a New Journal— *Computers, Reading and Language Arts*

Computers, Reading and Language Arts (CRLA) is the first educational journal to concentrate on the use of computers in the language arts. CRLA will emphasize non-technical articles with clear classroom teaching implications for both novices and experienced computer users. The journal will provide information on the practical uses for computers in teaching basic language arts skills. Future issues will deal with topics such as using computers to help teach spelling, punctuation, creative writing, vocabulary development, and reading comprehension. In addition, reviews of software, books, curriculum methods, and materials will be presented.

CRLA is a quarterly journal. For individuals, a one-year subscription is \$14.00. The subscription rate for schools, libraries, and other institutions is \$18.00. All subscription orders should be sent to CRLA, P.O. Box 13247, Dept. N, Oakland, CA 94661. (Checks should be made payable to CRLA.) Manuscripts should be sent in triplicate with a stamped return envelope to the same address.

For convenience, comfort, and dignity, consider an auditorium for Brookfield High School.

(1) Convenience. Now, visitors must search for different meeting locations, such as the Little Theater, gymnasium, cafeteria, or a classroom. They tend to get lost.

(2) Comfort. Now, visitors must sit jammed in the truly-little Little Theater, or perched on the hard gymnasium bleachers. They do get weary.

(3) Dignity. Now, visitors must endure distractions such as people staring out of classroom windows, or across at them from the bleachers opposite. They feel undignified too.

For these three reasons, do consider a Brookfield auditorium now.

An auditorium at Brookfield High would provide many benefits.

It's inconvenient for visitors to try to find the Little Theater, or Cafeteria, or gymnasium, or a classroom for events. An auditorium would centralize events

for visitors in one convenient place.

Those visitors also find it uncomfortable to squeeze into the minuscule Little Theater (with hard wood seats) or to perch in the gymnasium (on backless bleachers). An auditorium would thus provide more visitor comfort too.

Visitors also find the existing meeting places distracting. People stare out of the cafeteria windows, or at the other people in the bleachers. By concentrating attention, an auditorium would dignify ceremonies.

Convenience, comfort, and dignity—three reasons for a Brookfield auditorium.

THE CAMERA EYE AND TWO FRESHMAN WRITERS

David Sosnowski and Russell E. Stratton

I was born cross-eyed. Not until I was four years old was it discovered that this was caused by my being abnormally farsighted. My vision was thereafter fully corrected with lenses. Until four I could see only large patterns, houses, trees, outlines of people with blurred coloring. While I saw two dark areas on human faces, I did not see a human eye or a teardrop or a human hair until I was four. Despite my new ability to apprehend details, my childhood's spontaneous dependence only upon big pattern clues has persisted.

R. Buckminster Fuller,
Utopia or Oblivion: the
Prospects for Humanity

Light, sight, and optical systems have long been employed as metaphors in the discussion of composition and the act of cognition in general. We speak of a term paper's "lacking focus" to the extent that the reader is unable to "see" the writer's "insight" on the topic under consideration. We instruct our students to "zoom" or "telescope" in on certain details in their compositions, to "shed light on," "highlight," or otherwise "bring into the foreground" this or that aspect. In daily conversation, we refer to intelligent individuals as "bright," and the hackneyed iconography of Hollywood depicts inspiration by means of a light bulb floating over a thinker's head. This metaphoric connection between optics and the thought process is, in turn, reflected and supported by most western mythologies that have arisen to explain the origin of man's consciousness. The Greeks, for example, gave us Prometheus, who brought man light in the form of heavenly fire and whose name, in turn, means foresight, while in Norse mythology Odin is said to have sold his eye in a bargain for omniscience. Even in the Judeo-Christian tradition, Eve is tempted to partake of the fruit of the tree of knowledge by the serpent, a.k.a. Lucifer, whose name means light-bringer.

This basic connection among language, thought, and sight has, however, been virtually ignored by teachers of composition. We pay lip service to the connection; the metaphor is there, built into the language we use to discuss language, but it remains a superficial consideration when we get down to the practical, nuts-and-bolts teaching of composition. We employ so-called "visual aids," but more often than not this involves using overhead and opaque projectors in the capacity of high-tech, special-effects versions of the ditto machine, for purposes of disseminating information that has nothing to do with the optical properties of the machine itself. What we need to accomplish is to move from superficial, language-bound metaphor to practical, instructional models. We should, in fact, zoom in on the notion of the camera eye as a model for composition, shifting its status from background to foreground.

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One notable exception to the above-mentioned lacuna is found in the seminal work of the late Francis Christensen, who in *A New Rhetoric*, with Bonnie-jean Christensen (New York: Harper and Row, 1976), investigated the camera-eye technique of composition, the concept being that (just as in this cumulative sentence you are now reading) a writer moves in closer on objects, zooming in or focusing on them, accumulating details as the generalized blur yields to specifics, providing the reader with more and more information as the sentence (and, writ larger, the entire paper) progresses. This movement, however, is not always forward-motivated; sometimes the camera withdraws, too, creating a relaxation-and-tension rhythm. In the larger context of the entire composition, this backward movement is reflected in the so-called inverted-pyramid model of journalism, in which the motivation is not to generate suspense, but rather to get all essential details "up front" as soon as possible, allowing editors with limited column inches to slice from the bottom up without eliminating vital information.

The Christensens demonstrate this camera-oriented technique of writing by numerous examples drawn from practicing professional writers, but here one will suffice for introduction, this by Arthur Knight, reviewing the cinematic adaptation of Nelson Algren's *The Man with the Golden Arm* (*A New Rhetoric*, p. 98): "And Otto Preminger has directed his film with a technique that brings them constantly into the play of the action, a camera that is constantly on the move, swinging from face to face, tracking over the bare floor boards from an unmade bed to a scaly door, binding characters and backgrounds together in a tight, almost claustrophobic unity." The movement in this sentence progresses from the film itself to technique to camera to subject--then back to the room and its relationship to characters. The structure of the sentence itself seems to reflect its subject matter admirably, alternately panning, cross-cutting, zooming in and facing back, creating a unity (or point of focus?) between content and style. Granted, this particular quotation comes from a chapter demonstrating "Dominant Tone," but similar examples can be found throughout Christensen's work.

James Gray, more recently, has written of his own adaptation of Christensen's generative rhetoric ("Sentence Modeling," in *Theory and Practice in the Teaching of Composition*, Urbana: NCTE, 1983, pp. 185-202), an approach based less upon naming and numbering sentence levels, more upon having "students examine variations of the cumulative sentence in scores of sentences written by a number of professional writers and imitate these methods of modification in sentences of their own. In the most important step in the process, students apply these now-familiar structures by writing longer, extended sequences" (p. 186). Gray presents impressive examples of students' work later in the article, a most helpful, confidence-building approach for instructors willing to experiment. Thus, whether descriptive or prescriptive approaches are employed, free modification cannot be regarded as a new technique although it does seem less utilized than it might be; when used, it has been successful through the years at many different levels, from junior high school through the writing projects, from graduate seminars through inservice sessions. To what extent, however, is the camera-eye scheme more than simply a handy metaphor for the generation and construction of sentences (and larger linguistic units) through the use of free modification?

During a recent semester the authors had an opportunity to study two college freshmen who were also expert photographers. The first was Dennis, a white Alaskan resident and an outgoing, traditional student who has recently been offered the position of photo-editor on the university's newspaper. The second is Winton, a non-traditional student of native Alaskan descent, who is more reserved, to the point of being shy, but who is also very attentive and has sold photography to Alaska magazine. In personality and appearance, the two students are virtually diametric opposites. And yet they share a common interest, photography; but that is not what initially brought the two to the authors' attention. The first point of interest was another talent that the two share—a remarkable competence in the area of descriptive prose and the ability to grasp and utilize the notion of free modification with great effectiveness. The additional connection of photographic ability was only discovered later, during the course of interviewing.

While it is difficult to generalize from two examples and while personal interviews can be misleading, nevertheless some interesting information has emerged from our study. We group this information under two headings, previous influences at home, and present attitudes toward writing. After presenting this information, which was gleaned from the aforementioned interviews, we will move on to discuss specific examples of each student's writing.

Dennis comes from a family whose first language is English. Although his parents, a medical paraprofessional and a secretary, do write in their jobs, reading at home was always more important than writing, which even in school was not practiced often, with most of his high school courses being grammar-oriented. His reading, eclectic, included "spy novels and the classics"—the sorts of stories in which a reader attempts to "second-guess" the writer (in his view)—but the only composition he remembers with pleasure is poetry written for a girl friend. Interestingly enough, there was no TV at home for most of his eighteen years there. Dennis's habits include playing the drums, sketching (primarily geometric patterns and cartoons), and as mentioned earlier, photography. He plans to make a career in photojournalism.

Dennis's present attitudes toward writing are somewhat unsettled, as might be expected: "English" has never been a problem (although he has been only a mediocre achiever in other areas of study, referring to math, in particular, as "an enemy"). This year, he has been taught a variety of prewriting techniques, among which he prefers looping. Previously, however, he was able to "get ideas" through listening to classical music, which tended to generate "feelings, then pictures." And after a fermenting period, these emotions-turned-images would then be translated into words. Composition, then, comes easily for Dennis, although he does not enjoy revising and is disturbed by and surprisingly Puritanical toward spelling errors and penmanship, an attitude which has led to some heated debates over spelling corrections made in his papers. This concern for surface appearances is a stance he combines with what he calls "ethical writing," that is, a regard for the high purpose of composing anything and a deliberate avoidance of all dishonesty (a stance which we did not always find reflected in his papers). Perhaps posturing, he spoke of his own writing as being conceived along the lines of a "Rorschach Aesop's fable." This concern for morals and morality in writing is, in turn, reflected in his attitudes toward other subjects, more conservative, perhaps, than one might expect to find in a traditional college student.

Winton is a native American, an Inupiaq Eskimo whose first language was not English although he initially denied this, primarily due to the fact that he is no longer conversant with his first language, Inupiaq, which he is presently relearning. He is even less of a traditional student in that he is now almost thirty years old. Thus he does not mention his parents but instead speaks of his early reading, "non-fiction," and of his fondness for the outdoors. He was educated at a boarding school for native Americans and seems to have an excellent idiomatic control of both spoken and written English. In his life, too, in fact until two years ago, he had no TV at home. His hobbies include playing guitar, sketching (primarily outdoor scenes, for he admits he "can't draw people"), and photography. Although he has been a photographer for only three years, he has already been paid for his work and is considering a career in photography.

Winton's present attitudes toward composition are reserved and had to be searched out; but he finds personal writing more difficult than writing about places although he considers himself a "natural writer," while admitting that new ideas are often generated as he progresses. He, too, favors looping but first thinks "in pictures, which lead to words." He discusses no theories of composition but is open to new approaches, particularly free modification; and he will revise extensively with considerable patience.

Both students, as previously mentioned, have demonstrated a marked ability for using free modification in their work although, as might be expected, the majority of their cumulative sentences occur in the decidedly descriptive or graphic portions of their writing. Of the two, Dennis seems to have developed the tendency naturally, without prior instruction, having employed the technique since the beginning of the semester, well before the topic was introduced. From the beginning of our study, his papers have had a distinctly photographic flavor. Consider, for example, the following passage which comes from the introduction to a place description:

Water puddles glisten brightly in the spring sun, their shapes altering as, from time to time, radial tires plow across their diameters. Sheets of chocolate brown water spray the sidewalks.

The promise of spring is voiced rambunctiously by scores of cavorting sparrows. Wheeling flocks of gulls scavenge the shores, looking for tidbits.

Spring mornings are my favorite so I have already dressed and eaten breakfast by 6:00 and am sauntering eagerly toward the harbor of Kodiak. Invigorated by the early morning sunshine, I notice an increase in stride as I approach the harbor, along with the quickening in pulse which always accompanies my first look at the sleeping boats after a long winter.

Notice how the student starts out at a distance and gradually zooms in, stopping the camera now and then to freeze the action and pick out details, and then moving on. This snapshot, freeze-motion ability (which both writer-photographers demonstrate to a certain extent) should not be underestimated

since it provides a most convenient way of surmounting one of the beginning writer's major difficulties, namely where to start and how to make sense out of seeming chaos. In composing an actual or mental photograph of a situation, freezing it for leisurely observation and contemplation, both writers take a major step toward organization by limiting the jumble of sense impressions to what can be observed in a single, fixed moment. The idea of a photograph itself provides an easily conceptualized model for the structure of a paper, the photography achieving a sort of automatic unity which arises from the complementary yet easily distinguishable components of background and foreground, suggesting a parallel with theme or thesis, substantiation, and conclusion. These snapshots are not, however, wholly static; they form a sequence which, as already stated, tends to zoom in, and by the third paragraph the writer-photographer finally turns the camera around to give us a snapshot of himself against the background he has carefully drawn in the two previous paragraphs. Notice, too, how his movement echoes in a larger sense what is occurring in the individual sentences. Just as the first two paragraphs act to telescope in on the narrator, so too does each separate sentence move from large to finer details through a series of terminal free modifiers. Once the narrator is introduced, however, the employment of free modification increases, as if the writer were simply "warming up" in the first few paragraphs, with free modifiers later occurring in the initial, medial, and terminal positions, a tendency which is maintained throughout the remainder of the paper. Thus, even the frequency of the use follows a "zoom" pattern. And this paper is typical of the student's descriptive prose (although his analytical work is unfortunately less impressive, the result of his use of mediocre and cliché lines of argumentation even if his use of telescoping structure and free modification remains constant throughout all his assignments).

Winton, on the other hand, although a consistently competent writer, only occasionally used free modification before the topic's formal introduction in class. Afterward, however, its employment seemed to become second nature to him. Consider the following two writing samples, the second a revision of the first after a single, brief discussion of generative rhetoric:

The weather in May in the Bering Straits area varies from cold and snowy to foggy and cold to warm and sunny. Wind is almost always present in any condition.

One Sunday in May, 1972 dawned with the promise of a good day. The skies were partly cloudy and a gentle breeze with occasional light gusts blew from the North.

Midway across the Bering Strait, Fairway Rock, a small island of solid granite that rises out of the sea, was capped by a small wind cloud. The Diomedé Islands seven miles to its right were cloudless and for once free of the fog that so often seems to envelop them.

Cape Mountain, which looms over the village of Wales, was also cloudless. It looked like a good day for hunting seals on the calm sea. The only hint of what was to come was a narrow band of gray, low on the horizon to the South.

I went out hunting, whenever weather conditions permitted, with six other men in a 24 ft. long walrus skin covered umiak. The boat belonged to one of the whaling captains in the village and was on loan to one of the men on our crew. He acted as captain and that morning his son assembled the crew.

Then the revision:

The weather in May in the Bering Straits area varies from cold and snowy to foggy and cold to warm and sunny, and it can change quickly, sometimes within hours. Wind is almost always present in any condition, either blowing out the pack ice to open up a lead or driving it ashore to rumble, moan and sigh as it grinds against the shore-fast ice.

One Sunday in May, 1972 dawned with the promise of a good day, the sunlight filtering through a partly cloudy sky. A gentle breeze, with occasional light gusts that lifted the clothes hanging slack on a clothes line, blew from the North.

Midway across the Bering Strait, Fairway Rock, a small island of solid granite that rises out of the sea, was capped by a small wind cloud stretched taut on its head. The Diomed Islands, seven miles to the right and fifteen miles further, were for once cloudless and free from the fog that so often seems to envelop them.

Cape Mountain, looming over the tiny village of Wales, was also cloudless, usually a sign of good weather. It looked like a good day for hunting seals on the calm sea. The only hint of what was to come was a narrow band of gray, barely visible, low on the horizon to the South.

I went out hunting, whenever weather conditions permitted, with H A, J F, B T and A R and C S in a 24 ft. walrus skin covered umiak. The boat belonged to R O, one of the whaling captains in the village and was on loan to A. A acted as our captain and that morning his son R assembled the crew.

Like Dennis's work, both of Winton's versions follow a pattern of movement that starts at a distance from the narrator and then gradually moves in through a series of snapshot paragraphs that momentarily freeze the action. However, in the revision (a particularly apt word in this case) the writer has taken another look at his subject through his mental camera and, while maintaining the initial external structure and organization, has added depth and detail by infusing a number of free modifiers. The additions are not careless or awkward; the student demonstrates a clear understanding of and ability to use additional sentence levels. Where these additions have been made, they tend to blend in smoothly and improve the paper. It is important, too, to note that the student did not fall into the tendency of saturation, of shoehorning wherever possible. When the pace of the action in the narrative quickens

later on in the piece, the frequency of free modification declines in order not to encumber the prose rhythms. After this assignment, Winton continued to employ generative rhetoric techniques effectively for the remainder of his assignments, both descriptive and analytical.

In conclusion, then, we found several similarities between the two students: both seemed to flourish in the absence of TV (with TV and photography in this instance regarded as antithetical, the former passive, requiring none of the active composition decisions necessary in the latter); both were readers early on; and both think in pictures before and during prewriting. More important, both seem to relate photography to their writing, moving easily from the long shot to the close-up, panning, telescoping, and so forth, revealing for us a vital link between the two fields, one whose implications must be studied comprehensively. In their writing, they seem able to freeze the frame before moving on, a technique that pedagogically might be important in developing reluctant writers (and even others). What implications does all this possess for us as teachers of composition? The evidence is insufficient but tantalizing enough to warrant further investigation into the possible utilization of the camera-eye technique as a model in composition. It seems certain that this approach contains considerable significance in the area of descriptive writing, whereas its effectiveness in analytical (expository) modes is somewhat ambiguous. If this is, in fact, a flaw, then we need to investigate methods of encouraging competence in one sort of writing (i.e., descriptive) to flow into others, rather than constructing, as we have, artificial barriers between creative writers and others. That, after all, is exactly where Francis Christensen began.

EXERCISE EXCHANGE

A Call for Manuscripts

REMEMBER WHAT WE DO

There seems to be a growing proliferation of journals devoted just to the teaching of writing. We applaud that movement. But we'd like to remind our readers of *Exercise Exchange* and potential contributors of what should be obvious: teaching English involves more than teaching writing.

The general suggestions below represent the kinds of things we are looking for in articles submitted to *Exercise Exchange*. Submitted articles should, of course, emphasize concise, practical descriptions of teaching activities which stress student involvement in learning.

Computers and Literacy

What are some practical ways of using microcomputers in the English classroom?
What are some of the successful uses of word processors?

Language

How can language study become an integral part of class instruction beyond just drill work? What are potential sources for language study and how may they be used? What are some successful ways of incorporating dialect study into the English class? History of the English language? Semantics? Vocabulary study?

Visual Literacy

Are movies still useful in teaching English? Are they appropriate for study in and of themselves in the English class? Has anyone found ways of using the new video-cassettes? Is anyone using television successfully, either as a medium for instruction or as a class text/resource? What role can video journalism play in English? Photography and English? Art and English? What kinds of cross-media analysis work?

Listening

What strategies work for developing students' listening skills? How can such skills be taught in conjunction with other aspects of English?

Journalism

What are some new ways of teaching journalism within the regular English class? In a journalism class? Ways of helping students understand the roles of magazines and newspapers in our society? Ways of helping students become effective users as well as producers of such media?

Regional/Local Materials and Resources

Do oral history projects have to be the sole province of social studies? What kinds of local resources have proven useful in English classes? How can students become involved in using regional or local materials as part of their learning?

Learning Disabled

What strategies seem to work best with learning disabled students? What topics, and materials do they seem to respond to best? How can classrooms be set up for such students? What are effective ways of working with such students when they are main-streamed into the English class? What are some successful strategies for teaching English to blind or deaf students?

Literature

What are some effective ways of doing the following: teaching contemporary adolescent literature; making classics relevant for today's students; using dramatics—role playing, scripted drama, readers theatre. How does a teacher make Shakespeare accessible to poor readers? How may contemporary drama be used effectively? What are some successful teaching approaches for meter, rhyme, free verse and traditional forms of poetry? What are some effective strategies for using nonfiction? What are some effective methods for teaching ethnic literature?

Writing

What are some effective ways of doing the following: preparing students for various types of writing; designing unique assignments (with an accompanying explanation of how they are introduced and developed); helping students learn the importance of revision; ways of evaluating writing; using peer response in the classroom; cross-discipline writing experiences; all-school development of writing skills; teaching different modes of discourse, especially analysis, narrative, classification, cause/effect, definition; ways of using letters and journals; ways of teaching audience awareness; ways of helping students narrow topics and becoming more specific in their writing; ways of teaching the mechanics of writing—capitalization, punctuation and spelling; ways of teaching research skills other than through the traditional long research paper.

Multi-ethnic and Bi-lingual

What are some successful approaches in dealing with an multi-ethnic population in the English class? What are some successful strategies for teaching bi-lingual students?

Speech

What are some ways of helping students learn discussion skills? How can speech be related to other aspects of English? What are some effective ways of helping students prepare and deliver speeches for different audiences?

Articles concerning any of the listed topics are welcome. Manuscripts should be submitted in duplicate with SASE. Footnotes should be kept to a minimum and incorporated within the text. Address inquiries and manuscripts to Charles R. Duke, Editor, *Exercise Exchange*, Department of English, Murray State University, Murray, KY 42071.

ADVENT OF THE POST-GUTENBERG UNIVERSITY

Joseph Raben

Online bibliographic retrieval is being used by increasing numbers of scholars. The advantages in speed and accuracy are obvious; at least one scholar, however, has warned of a possibly dangerous trade-off; by providing faster access to greater stores of information, he cautions, we may be producing a generation of students who miss the "educational experience and broad introduction to the discipline that the print tool furnishes." These he details as poring over bibliographies and footnotes, reading background material, browsing in the stacks, and looking through indexes. As the computerization of our entire society and its campuses accelerates under the impulse of the microcomputer, such words of caution may be appropriate.

But this view needs correction in its perspective. Not only our libraries are experiencing automation; computers have long performed class registration, maintained student records, facilitated research in the natural and social sciences (and even somewhat in the humanities), and of course spawned the fastest-growing major—computer science. Thus the applications of this technology to the traditionally expensive, time-consuming, frustrating, and inefficient method of building a bibliography for a research project (student or faculty) is but a logical extension of a process that has hardly begun and certainly has much further to go

Of particular interest to the academic community is the computer's present and future impact on scholarship and instruction. Although both seem to be set in patterns evolved over centuries and sustained by elaborate rules, standards, and traditions, they may be as susceptible to changes as our methods of traveling, manufacturing, entertaining ourselves, or supplying our needs; jet planes, assembly lines, television, and the agribusiness of mass producing and preserving food have demonstrated that there are no "inevitable" ways of conducting these activities. Properly perceived, the computer (and particularly the microcomputer) can alter and improve the academic environment as substantially as the preceeding technologies altered theirs.

Basic to this change is the discovery by researchers in all disciplines that office-type word processors can be very useful in preparing articles and books for submission to editors and publishers. Many of the tedious and repetitious tasks of preparing typescripts are being reduced and eased. Once a piece has been "typed" (that is, stored in the machine's memory), it can be brought up on the screen and readily modified innumerable times, by deletion, insertion, and transposition, until it suits the author and the arbiters of the publication it is submitted to. Built-in instructions will automatically number the pages, insert running titles, format footnotes, and tend to all the trivia that conflict with creativity but are required for an acceptable submission. Only when the writer is totally satisfied need there be a printed copy. The marking up of typed copies and the retyping of entire pages can thus be totally eliminated.

It has already become common for scholarly authors, particularly those of books with restricted markets who wish to offer publishers reduced production costs, to

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submit a tape cassette or a diskette from a word processor rather than (or in addition to) a typescript. With special machine codes inserted, such a medium can instruct a phototypesetting machine, without further human intervention, to produce camera-ready pages. The publishers' savings in the high costs of keyboarding (typesetting), proofreading, correcting, and reproofreading should forestall for a while the total disappearance of the highly specialized monograph that finds its market in only a few institutional and private libraries.

One special scholarly application of this technology is particularly noteworthy. The editors of historical documents, such as the papers of Jefferson or Edison, are finding that using word processors instead of typewriters allows them to enter codes for special typographical effects (for example, the common eighteenth-century custom of abbreviating names with a superscript letter can be observed: Tho⁵). But some of these editors are also aware of additional important benefits from using word processors, principally that once the texts are machine-readable, they can be transferred to a large computer and extensively processed in a variety of ways. Most obvious of these is the creation of verbal indexes and concordances to the texts, which (as with literary works) are basic tools for thematic and vocabulary studies. If steps can be taken soon enough to establish a single encoding standard and to persuade all historical editors to adhere to it, the result could be a vast data base of primary historical information which could be searched on such interesting terms as liberty or citizenship. As other means of exploring these documents came to mind, the whole basis of historical research might be altered.

Beyond their scholarly applications, word processors may also become useful in teaching. Some faculty members—at least those concerned with instructing students in writing skills—have already come to believe that the relative ease of composing and revising on word processors may facilitate the acquisition of better writing habits. The proliferating "spelling checkers" for business offices can now only report that a combination of letters is not to be found in a list, but cannot yet signal when loose is an improper spelling of lose. Despite their current limitations, they have been viewed as aids by getting students past their writing blocks and into a lucid, organized exposition of ideas. The manufacturers of office machines are already working on programs to catch and even correct simple errors in grammar, punctuation, and word choice. Style itself, to the extent that overworked words and phrases can be noted, is said to be subject to improvement through the use of word processors.

Whether people who shied away from "computers" are now accepting "word processors," the simple truth is that the entry of words into a machine of this type is no different in principle from entering them into any other device based on microchips. Since all such mechanisms depend on the same technology, the only variations in storage methods result from commercial competition or lack of coordination within the industry. Perhaps now that IBM is free to get into communications and Bell is free to get into data processing, the pressure for universal standards will ease the free flow of information from any system to another. If so, the text of an article or book stored in a word processor will be transmittable in seconds, over existing phone lines or some new networks (perhaps incorporating fiber optics), to editors' or publishers' offices. Scholarly journals will, with such a system, be able to send out articles for refereeing and receive reports without any more delay than the referees themselves create. Where information is considered timely—and our news-on-the-hour-twenty-four-hours-a-day society seems to be putting everything into that category—this new technology can dramatically reduce the time lag now caused by the physical transmission of paper through an increasingly obsolescent postal system.

Of course, if electronic transmission becomes the basic mode during the editorial and production phases of publishing, the inevitable question is, why publish the final project on paper? To a growing number of specialists, there seem to be many valid reasons for completing the link between author and reader by distributing the published item over the same network as was used to edit it. Much of the required hardware is already in place. Several commercial networks already offer discrete bits of information, like stock market reports and plane schedules. All major university computer centers are linked by several national and intercontinental networks, just as all major libraries are connected to bibliographic and cataloguing data bases. Slowly, these facilities are being opened up to larger units of text: the entire Encyclopaedia Britannica, for example, can now be searched by subscribers to one commercial information service, with the screen displaying at any time about a dozen lines preceding and following any specified word or combination of words.

From such beginnings it is but a short step into the "online" distribution of short articles. This step will probably occur first in science, where publication is already characterized by brevity and speed. How soon the social sciences and humanities follow suit will be determined by many factors. Publishers may press for the economies to be achieved by eliminating typesetting, paper, printing, binding, mailing, warehousing, returning unsold copies, and all the other financial burdens willed to us by Gutenberg. Libraries, bulging with inexorably growing files of journals and almost unable any longer to buy books, may well express a preference for publications that reside electronically in a central location and are transmitted only on request. If a paper copy is generated, it will be the property of (and can be charged to) the individual who requests it. Readers may also press for such a system, since it would provide even the most remote library with all the information now found in only a handful of metropolitan centers. For the vast majority of scholars today, unable to travel to such centers and to reside near them long enough to exploit their resources, electronic access through online systems (even from their homes) could be a "great equalizer" in access to the scholarly resources necessary for research and instruction.

A major benefit of online storage and dissemination of scholarly publications is not available in any other medium, that is, rapid searching through large quantities of material by means of "Boolean" descriptors (a name honoring George Boole, a nineteenth century British logician). This method allows the searcher to designate not only a central term, for example, Byron, but also other terms that will circumscribe the search, such as with Coleridge but not Shelley. If all existing books and articles were accessible by this means, a scholar could instantly locate the few significant mentions of the successful Byron's involvement in the career of the failed Coleridge, a topic infrequently discussed, while ignoring the repetitive accounts of his friendship with his mistress's brother-in-law, a bit of scandal that has little to do with the poetry of all three men.

Additional Boolean descriptors can specify the dates before or after which an entry is relevant, places of publication ("only Paris" or "not Berlin" or even "only Paris when coupled with Berlin"), or any other kind of unambiguous information that can be expected to be recorded. While one cannot expect to be supplied with "only the major materials," still the method can be of tremendous help in locating useful information in the vast quantities of scholarly publication and has already, particularly in the sciences and social sciences—easily and fast—opened many new directions of exploration that were closed because the primitive nature of card and book indexes has made the initial searches so difficult. When the bulk of this type of information becomes available in its most accessible form, this indexing capacity will be one of its most important features.

But online publishing has more than a positive aspect. Skeptics and outright opponents of such a system have already raised some practical objections, of which the most realistic is cost, for even putting only future publications online will require vast expenditures for equipment that is not yet cheap. To convert as well the existing contents of our libraries would cost more than our military budget, or some equally astronomical amount. Since no one has yet suggested that such an expense be undertaken, questions must be raised concerning the feasibility of a hybrid system, the old part print, the new part electronic. Other reservations concern the reliability of information in a system which is presumably more easily entered than the one evolved over the past 500 years, with its referees and advisors, editorial committees, and the imprimatur of established journals and publishers. Can readers trust information published in a newfangled medium where these safeguards may not prevail? Can promotion committees rely on such a system to indicate the quality of scholarly production when there will not even be offprints in the candidate's dossier? Such questions reflect not only a conservative fear of a new and untested system tied to an expensive and sometimes unreliable technology, but a respect for an established one that took generations to evolve and that has, in general, served its purposes. Thus before online publishing becomes a reality throughout the academic world, there will be many upheavals in the way scholars communicate and the way they are rewarded for successful utilization of the system.

A parallel upheaval, of even greater dimensions, and based on the same microprocessor technology, may also be under way in the teaching sector. As with word processing, there are two modes, more or less distinct now but always capable of merging. The earlier one, established when only large, "mainframe" computers existed, requires that expensive transmission lines be leased. In return, the user gets access to a large store of education programs covering the entire curriculum but with a heavier concentration on scientific subjects and the lower level schools. Since the introduction of microcomputers only a few years ago, many of these programs have been rewritten for stand-alone machines, and a rush of activity, both on dining-room tables in provincial towns and in the offices of metropolitan textbook publishing houses, is trying to anticipate the expected boom in instructional software. A significant sign of the speed with which microcomputers are becoming capable of taking over classrooms is the recent announcement that the Apple computer, which did not even exist a few years ago, can now be linked in groups of up to thirty units to allow students access to large central information stores and to put the teacher in touch with any of them at any time. With schools, manufacturers, and even national governments contributing to flooding classrooms with microcomputers, there will be a growing demand for both technical improvement and better programs ("software") to justify this first investment in equipment for our schools, which (outside advanced science instruction) have traditionally operated in a highly labor-intensive mode. Our whole way of conceptualizing the educational process will be increasingly scrutinized.

Until such scrutiny results in the possible total reconstruction of our schooling system, the current condition may help us to forecast future developments. Whether we consider instruction systems of the online or stand-alone mode, the emphasis now seems to be on what the computer does best rather than on the students (and teachers) need. In fact, a substantial portion of microcomputer sales is based on the premise that future generations of students will need to understand the computer itself as the foundation of their success. From this central idea, apparently, come programs that teach foreign languages by drilling students on lists of vocabulary, or on arithmetic by presenting a series of problems with notice given as to whether the answers are right or wrong. That is, the machine's ability to present a question, to compare the answer to a stored response, and to present then a signal of approval or disapproval is utilized without any defense of the proposition that this is the preferred method of instruction. Only in some areas, notably science, are more pedagogically imaginative efforts being made to help the student grasp principles, to progress in a fashion compatible with individual abilities, and to move at a pace that will not only permit steady accomplishment but create constant challenge.

But in the few years that these systems have been available, they have not persuaded the majority of classroom instructors of their superiority over conventional methods, and their true potential is only now being recognized and explored. The data base concept, already mentioned in connection with scholarly research, may be much more relevant as an instructional strategy than the quiz approach. In the existence of online encyclopedias, for example, lies a possibility for encouraging students to follow individual lines of inquiry, not only within subjects but across them. Such students, truly browsing and selecting information that links with already required knowledge, may be not only educating themselves in particular subjects, but also learning the most important skill—how to acquire knowledge.

For such a method of instruction to succeed, however, it may be necessary that teachers abandon, or at least diminish, the entire panoply of units, assignments, tests, scores, and promotions which have become the modern definition of education. Even though computers are excellent manipulators of numbers and instructors may therefore be further enticed to invent and manage numerical scores as the analogs of learning, there may arise a counter attraction of unstructured information of a sort and in a form that is less forbidding than we have managed to present in an environment of fixed schedules, fifty-minute hours, regular exams, passing grades, and all the other paraphernalia of regimentation. We hear of students who are classified as illiterates in school but who read Popular Mechanics or Penthouse on their own. Where there is motivation—either racing cars or sex—students can acquire both skills and information. With almost unlimited information bases and the means of exploring them, many such students may overcome the challenges of education which have heretofore defeated them.

Such a radical shifting of the fundamental practices and concepts of educators is not likely to be made rapidly or voluntarily. The emotional and financial investment in the present system is too great for easy abandonment. But, in addition to any attraction inherent in the computer itself and the potentials it implies, there are economic forces, channeled by the bureaucrats who manage the education industry, which may compel the adoption of the new technology. A precedent lies ready at hand in the computerization of school records, which (like the census and other essentially counting activities) have been greatly improved in accessibility and speed of updating. In fact, many "educationals" programs being promoted today are simply record keepers for the individual classroom—miniature versions of the registrar's software.

The danger in approaching instruction from this end is simply that the emphasis will be increasingly on grades rather than on learning, and therefore on what can be easily graded: short-answer, true/false, matching. Subjects of complexity and ambiguity will continue to be reduced to simple and certain dimensions "because we had to computerize it." This rationalization has little or no validity. Only laziness, ineptitude, or greed can account for doing any less than the machine is truly capable of. Artificial intelligence techniques can already stimulate comprehension well enough to support interactive dialogues to an almost Socratic degree. Voice synthesis can be used to train students in the vocabulary, syntax, and even pronunciation of foreign languages. The videodisc provides a practically limitless store of visual information to reinforce the educational strategy of the computer. All these possibilities are still waiting for development beyond the most primitive and experimental level. They need the searching imagination of all concerned—educators, information scientists, applications programmers, engineers—to bring their potential to reality.

That potential will probably not be realized as long as it is based on only the alphabetic and numeric information that can presently be stored in computers. Even the generations before ours, which were not nurtured on television, found pictorial presentations fascinating. There are, furthermore, numerous subjects, from art history to zoology, that cannot be taught without a major visual component. But such instruction cannot be properly conducted with

today's microcomputers, for on all but the most expensive of them the graphics are repulsively crude. The best means available for presenting pictorial material in an acceptable form is another technology, the videodisc. Because this device has not yet succeeded in the home entertainment market, it is perhaps also doomed as an educational tool, for the industry probably needs a mass market to survive. But those who hope that computers may improve the education of students should hope that this medium does become generally available.

For instructional uses, this plastic disc has numerous attractions. The standard version (which looks very much like a phonograph record) can hold up to 54,000 individual frames on each side. this total of 108,000 images may be viewed in rapid sequence (30 frames per second) to create conventional action on a television screen. But in "freeze-frame" mode, each frame may be held on the screen indefinitely, so that the 54,000 individual frames may present, for example, the contents of a fair-size museum, or a very generous set of views of Mexico, or a long series of complex physics demonstrations. Furthermore, these frames may also be projected in slow motion—forward or backward—so that processes like mitosis may be studied at whatever speed satisfies the viewer. Two channels of audio may either be utilized for stereophonic sound or be employed independently, as for example, to provide either Spanish or English commentary at the user's choice. With some of the storage space on the disc allocated to simple computer programs, any particular frame may be accessed by its serial number if the viewer knows it. At present, the mass production of these discs is very inexpensive, but the cost of creating masters has not yet dropped low enough to encourage widespread interest in the technology. Two applications suggest the limits of imagination reached so far: a disc of birds and their songs, to accompany a field guide, and another, interactive with the user, that instructs in medical diagnosis.

This latter application reveals the direction in which the videodisc must move if it is to develop fully as an educational tool. coupled with a microcomputer, it will allow two kinds of searches by means of its effectively unlimited pages: under the user's control when a definite frame or sequence is known, under the microcomputer's control when guidance or prompting is needed. Branching programs, responsive to the user's age, accomplishment, needs, native language previous experience with the disc (or other discs), and other criteria that we will learn about, can exploit this practically inexhaustible store of information. Users can then pursue their interests on almost every level, safely simulating laboratory experiments, juxtaposing data across time or space ("which region was further advanced technologically in the sixteenth century—China or Europe?"), reenacting historical events, applying mathematical concepts to real situations—in a word, truly educating themselves.

For centuries, we have extolled the responsiveness of the human teacher. We then added the extensive information available in the printed book. Lately we have been impressed with the ability of the phonograph record, tape, and film to repeat endlessly the same oral/visual material without fatigue, or to replay selected sections on command. in the microcomputer and its peripheral equipment, we finally have come a long step closer to combining these qualities in a single entity that may begin to approximate the perfect teacher.

THE COMPUTER AND THE COLLEGE COMPOSITION CLASS: PROJECTIONS

Ruth Gardner

English 102, Writing Critical Essays, is the second-semester in Freshman Composition at the University of Arizona. It incorporates three works of literature and Peter Elbow's 1981 text Writing with Power and thus incorporates emphasis on revision and process. The first processes involve what Elbow calls first-stage thinking, or creative, "left-handed" or writer-based thinking. This expressive writing is focused in reaction to specific passages, chosen by the student, from the text to be interpreted (usually a novel, usually in a critical edition). The writing is transformed by revision processes into second-stage, critical, or reader-based thinking, organized into generalizations, including a central generalization, and supported by details from the text. The result is a traditional product, although reached inductively from students' responses to the text, indeed, from their own primary texts about the text.

The right-handed part of the process is supported by a second text, a current-traditional rhetoric by Frederick Crews, The Random House Handbook. The juxtaposition of a process-and a product-oriented textual, though superficially schizophrenic, is symbolic of the deeper contraries of kinds of thinking necessary to write a documented critical essay about a text. Each of the three essays written during the course is revised once or twice, the first essay after feedback from the instructor, the second primarily from peers, and the third primarily from written self-evaluation. The second and final versions of one or two essays include the ideas of professional critics. The audience is the class of co-readers and writers including the instructor, the purpose to convince this audience that the interpretation matters and that it is supported by details of the text and by responsible thinking from them.

Where will the computer fit into this already-crowded course, and, more basically, why use it at all? A theoretical justification (memo) to students might read something like this:

MEMORANDUM

To English 102 students

About the use of wordprocessors for writing critical essays

Word processing seems not only appropriate but almost necessary for this course emphasizing processes of generating and revising ideas about literature for several reasons:

- 1) Many writers using word processors write more words than with pen or typewriter. If you generate more words, you may also generate more ideas and details worth using in versions of essays.
- 2) Many writers using word processors write more quickly than with pen or typewriter. If you write faster, you may freewrite (freetype?) more easily and productively. You may also write in a more natural voice.
- 3) Many writers using word processors make more mistakes because mistakes are not as difficult to correct as with pen or typewriter. If you are free not to worry about errors, you can concentrate on ideas first, correctness later.

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- 4) Many writers using word processors are likely to begin with a middle section rather than the beginning of an essay because of the ease with which sections can be rearranged. If you are free to begin anywhere, you are not as likely to experience writer's block.
- 5) Many writers using word processors revise more than they do with pen or typewriter. They add more material, try deleting or adding words, phrases, whole sections, move a quotation and discussion of it to another paragraph, play around more with their writing just to see what happens. All of this is possible because it is simple to make changes without retyping the whole and because the words surrounding the changes simply reformat themselves. The word processor is the first writing tool actually to encourage revising; in fact, sometimes the difficulty becomes to stop revising.
- 6) Because spacing and margins automatically conform to English Department standards and because drafts always look professional in format, many writers using word processors find rereading easier than with written or typed drafts and are able to revise more objectively. Reading your words more objectively may help you to revise more effectively for other readers.
- 7) Many writers using word processors become more aware of their own writing habits and processes. And what you are aware of you can better control and use to your benefit.
- 8) Many writers using word processors enjoy writing more than when they use pen or typewriter, partly because it is faster and easier, but also because they seem to feel a different relationship to their own words, a sense that their writing is more fluid, somehow, more flexible. Your words appear so quickly on the screen in front of you; they can be moved up or down or sideways, changed and restored, saved for later revising, or even made static by printing them out on paper. You may enjoy this new sense of freedom and play more than any other aspect of word processing. And when you play with words, you play also with ideas.
- 9) As part of the latest technology, word processing skills may help you in later courses and professions, as may also more sense of ease about writing.

But where to fit the use of word processors into the course? Not during the first third of the course. Students have more than enough to learn, with Elbow's generating processes to learn through practice; models of students' essays to absorb for a sense of where their work will take them; a novel to read and generate ideas about, processes of revision to learn and use; feedback to give, receive, and incorporate; a third and final version to write, edit, proofread.

During the second third of the course students read a new text, learn alternate thinking and rethinking processes to use as needed, and learn to read and incorporate secondary sources in relation to their own ideas. But here we can introduce the material from the word processor, I think. (Students will know from the beginning of the course when they will use the word processors and why.) The first computer-related activity could be a fifteen-minute freewriting about their prejudices,

reservations, and expectations before they begin. (They will also write reactions after the first essay, and after the final essay. I will interview all or most of them toward the end of the semester. This feedback will, of course, modify the next course embodying computers.)

They will begin word processing at the stage at which they will most appreciate help. They will have written a first draft. They will have feedback on it. They will have read and noted critics. They may have added some new ideas to their text, but obviously they face major revising tasks in order to incorporate material from critical sources and to improve their own ideas, organization, and expression. Here the editing capacities of the word processor will come to their rescue. They can type their essays in as they are, then add, delete, and move sections about with speed and ease unknown to any other means of writing. The text will automatically conform itself always to the format preset by the instructor for students. We begin word processing with revising because the uniqueness of the word processor is most evident in its editing capacities, and because it is important that students do not get into the habit of using the computer merely as a glorified typewriter.

Before going to the lab (assuming that we have one ready to go; if not, before going to the computer-access store near the campus), students will receive a packet or small manual including a life-size photocopy of the keyboard and a list of necessary editing commands (Insert, Delete, Delete-Save, etc.) and formatting commands (Underscore, Superscript, etc.). I will select these materials from the system's documentation and rewrite them for clarity and precision. Some students will rely on the printed words; others will cheerfully ignore them in favor of experimenting with the computer. Working groups of two or three students will go together to the terminals. The dot command that one student forgets, another may remember, or remember where to find. And first encounters may be less anxiety-producing when shared.

When students have revised to a point at which they feel they need feedback, they will receive it first from the machine: a spelling checker will present misspelled words and words unknown to the dictionary used by the program (except for homonyms) for students to correct if they wish. It will also list words used and number of times each is used, revealing overused abstractions and passives. Other programs will give sentence length and as many other stylistic features as we program in. Instructors will help students to interpret the printouts and suggest solutions in class. Eventually the computer will give suggestions, as it does now in the Writer's Workbench system at Colorado State and WANDAH at UCLA. But always it is the writer who decides which suggestions to follow; students remain in control of their own texts.

When the writers are ready, they will do printouts of their drafts for group conferences about final revising. The essay will need no overall retyping; students return to the terminals with their disks (or to their lab files) to call up their drafts and revise. The final drafts will be printed out on letter-quality printers. Regardless of content, every essay will be professional in neatness and format.

But students must be given an opportunity to explore word processing for composing on-line as well as for revising. For the last essay, they will begin with the first freewritten reactions to the text and work through the complete process to the final essay. Students who need help during the generating stages will have available to them one or several kinds of invention programs like Hugh Burns' TOPOI or Helen Schwartz's BEGINNINGS or SEEN.² Examples of computer-aided instruction, these programs (or software, or courseware) are not the old drill type but sophisticated,

open-ended series of questions to help students think through aspects of their subjects. But with or without other programs, composing with a word processing program should in itself increase the flow of ideas.

We have had some experience with these things, since several students joined in a very small experiment at the Data Game, a computer-access store near our campus, during the spring of 1983. Three of the four students I interviewed actually moved from D to B essays during the time they used word processing on Apple IIs. The reason they gave for improvement was that it was so easy and interesting to play around with their essays that they spent much more time on the computer-composed essays than on their earlier essays. The fourth person lost her essay by pressing the wrong command and had to go home and write it out by hand the night before it was due. She is the only person who said she would not do another essay on the computer; her reason was that she didn't like sharing space with players of Dungeons and Dragons and Deadline. The other students were extremely enthusiastic in spite of the odd surroundings. One student said his typewriter was now on permanent loan, that he would never go back to such a primitive method as typing. Another said that she loved seeing her words all LIP UP on the screen and felt she was somehow there with them and that seeing them in print later was almost disappointing. And another reported that the word processor took away not only the drudgery of writing, but all of the physical aspects of it—there were only his mind, his creativity, and the responsive screen.

This is a beginning. We will move from one instructor experimenting with such a course during the spring of 1984 to about ten sections in spring 1985, as decisions are made about what hardware to invest in and how and where to set up computer labs or classrooms. We know that we will need flexibility, with quiet individual carrels for composing, clusters for group instruction, and single terminals with several chairs for group editing of one text. We know that we want to have networking capabilities that allow students to comment on-line about other students' writing and instructors to comment on work in progress. Eventually we will have available to us and our students a whole library of programs, from drill on spelling to help with sophisticated problems such as organizing or probing for ways to develop an idea, or overcoming writer's block. Or programs might provide help with interpreting a specific text, or with interpreting all works of a certain genre. Instructors may need and wish to write their own programs for specific needs such as paraphrasing or for tasks as complex as writing an interpretive essay about a text.

Using computers in our composition classes will change instruction also. Computer programs may take care of class rools, grade and attendance records; programs can help with commenting on students' essays (after we program in or accept by default what is to be said about which aspects of writing, what examples to use, what terms to define and how, what references to which books to include, what level and style of familiarity and sophistication we wish to use. Then we need only press a key to have a sentence or a paragraph of information printed out in a letter to the student).³ Simply having available to students a large variety of programs to assist with specific situations will be of great assistance to instructors, who can be freed to discuss the more important matters of the quality of students' thinking and the effectiveness of their examples. But I believe the two most important benefits to us as instructors may be that 1) writing our own programs will force us to articulate for ourselves and our students every stage of the thinking and writing processes we assign because we will be forced to articulate them to the machine. We will know, in detail never before required, exactly what it is that we are doing. And, 2) paradoxically, perhaps, these machines can make it possible to become more individual rather than less in our teaching relationships with our students. No two students will need

precisely the same combination of programs and techniques. With more resources at our command and more knowledge of what we are doing with them, we could become better teachers at roughly the same rate our students become more playful and productive writers and thinkers.

NOTES

¹ This list of potential benefits grows out of reading books such as William Zinsser's Writing with a Wordprocessor (New York: Harper & Row, 1983); articles such as Mimi Schwartz's "Computers and the Teaching of Writing," Educational Technology (November, 1982), pp. 27-29; attending computer sections of national conferences of 4C's and MLA; talking to other word processing writers, and composing with WordStar myself.

² Helen Schwartz, "Monstors and Mentors: Computer Applications for Humanistic Education," College English 44, no. 2 (February, 1982), 141-152. Hugh L. Burns and George H. Culp, "Stimulating Invention in English Composition Through Computer-Aided Instruction," Educational Technology (August, 1980), pp. 5-10.

³ A program of this type is RSVP, in use at the Miami-Dade Community College system, Miami, Florida, discussed by Lorne Kotler at the Conference on College Composition and Communication in Detroit, March 1983. See also Lorne Kotler and Kamala Anandam, "A Partnership of Teacher and Computer in Teaching Writing," CCC XXXIV (October, 1983), 361-367.

NCTE 1983 Resolution

ON COMPUTERS IN ENGLISH AND LANGUAGE ARTS

BACKGROUND: Because computer technology has spawned a new information age and computers are finding a place in the educational environment, many English and language arts teachers are training themselves in the uses of the computer and are becoming involved in the creation and evaluation of computer software.

As computer use spreads, so do computer-related problems. Poor methods and materials flourish with the good. Generous access to computers coexists with no access, a problem sometimes related to the socio-economic level of the students or the school and sometimes related to departmental divisions within the school. Mathematics and science departments receive top priority in spite of the wealth of computer-assisted instruction for all disciplines. Computers for composing--widely used outside education--are generally unavailable for English and language arts classrooms.

Because the problems are both new and complex, constituents are seeking guidance and direction. Be it therefore

RESOLVED, that the National Council of Teachers of English through its publications and professional meetings explore the effective use of computers in the teaching of English and language arts;

that NCTE urge equity of access to computers among students of varying socio-economic levels and among various departments within a school; and

that NCTE provide leadership in defining legitimate uses of the computer by encouraging research and by disseminating information about the role of computers in the English language arts curriculum.

PERSONAL COMPUTER ADS: THE POWER OF THE PITCH

Jane Connelly

Why call it an Apple? A computer by any other name would sell as well—or would it? How do advertisements lure potential customers with a new, versatile product like the personal computer (PC)?

Since students recognize computers as a part of their future, they'll be intrigued by the above questions. After all, no one wants to be duped into buying a poor product. Students will want to see how advertisers entice the consumer with slogans and product names.

Before you begin, you'll want to have a good collection to share with your students. You might display the ads on a bulletin board. Through class discussion, analyze and categorize the ads according to their similarities. Here are some examples of what you and your class may find:

REMEMBER ME?

Many ads use a key word or phrase to reinforce the product's name in the consumer's memory. One example is the Poppy PC ad, which beckons you to "Pick one for tomorrow." The thought of "picking a Poppy" establishes the product's name with a catchy phrase.

Advertisers may wish to emphasize a product's major selling point with the name. The Compaq Plan suggests that it is both portable and convenient. The name "Compaq" implies that it is "compact."

In yet another example, the Visual 1050 PC invites you to "See for yourself" that it has one of the lowest prices for a professional computer. Finally, the ADD's Mentor 3000 promises that "It all ADDs up" in the customer's point of view.

Alliteration and Rhyme

Another technique used to attract the consumer is alliteration, the repetition of beginning consonant sounds. The Compaq Plus uses alliteration by repeating initial "p" sounds in its ad for "The first high-performance portable personal computer."

Another ad for a portable computer states it is "The Commuter Computer." A seemingly simple expression such as "commuter computer" can accomplish several goals of the advertiser simultaneously. By using alliteration and rhyming words, the expression has a pleasant, memorable ring to it. The word "commuter" lets the consumer know the product is highly mobile. Also displayed in the ad is the remindful "From Sharp minds come Sharp products." With a total of ten words, the ad effectively presents both the product and the company's name.

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FOR YOU AND YOURS

Some ads reassure the consumer that their products can satisfy the computer whiz as well as the novice. Consider the following ad: "Epson. For those who need it, simplicity. For those who can handle it, performance." Similarly, the Hewlett-Packard PC 150, featuring a touchscreen, declares it is "Setting you free." A butterfly in the ad creates a pleasant mental picture of being freed from the old, mundane office tasks. A businessman's hand is shown touching the screen, reinforcing the PC's potential to maximize the user's ease and efficiency on the job.

Other microcomputer ads aim towards Mom and Dad in order to reach the computer market for children. Answering the unasked question, "Why buy one?", the now defunct TI Home Computer ad replied, "Because the sooner your child starts, the further he'll go." The Commodore's advertisements proclaim they are "Committed to Excellence in Education." Both ads stress the importance of the computer's role in a child's development.

C-O-M-P-E-T-I-T-I-O-N

Competitive advertisements take on many forms. Students can notice that some favor the subtle approach, whereas others are downright aggressive.

Timely Slogans

IBM's "A tool for modern times" exemplifies a prevalent theme—the promise that a particular machine can keep up with rapidly changing technology. Seiko carries this theme a step further by purporting that their PG is "Bred to think ahead." If the PC has been "bred" for the future, it is also "ahead" of other PC's in appeal and quality.

Variations on the same theme are endless. Cromenco claims it has "Tomorrow's computer today." The TI Professional Computer restates the same message—"The best personal computer on the market today. And tomorrow." Again and again, ads urge the consumer to invest now for immediate and future rewards.

Numbers

Using numbers in a product name also suggests that it is the latest model and consequently the best buy. The Commodore 64, TRS-80, and the Hewlett-Packard PC 150 are but a few examples. The Apple promoters obviously favored using this approach, for they produced the Apple II, IIE, III, and the IIE Plus. A new model implies that it is the "new-and-improved" version.

Aggressive Ads

Some advertisements aim directly at the top competitor—in the case of personal computers, the IBM. The Columbia IBM-PC Compatible Portable claims that "It prevents loneliness at the top." The word compatible not only assures the user it can be connected with the popular IBM, but the similarity of the word compatible to comparable may also be implied. Another Columbia ad declares that they "reward two business virtues. Foresight and cunning." Or, like the Corona, one may "Pick up where IBM leaves off," suggesting that it has features lacking in the IBM. Wang ads claim, "There's a side to the Wang PC that IBM would like to ignore."

Rather than mention competition, Digital claims to make "the finest personal computer you can buy." One gets the impression that it is above the competition. In the same vein, Sperry presents itself as an aggressive newcomer by the ad, "When you're late for the dance, you'd better have a very good reason." Below, it adds, "The Sperry PC. What the personal computer should have been in the first place." With the

idea that it is an innovative company on the way to the top, Sperry can present its product favorably against more established companies.

A FINAL WORD

Advertisements for personal computers were used in this article to explore only a few ways in which carefully chosen words can relay a desired message to an audience. Now have your students gather their collections and discuss the categories that were found.

Challenge the students to create their own PC ads and "advertise" by designing a magazine display or presenting a TV commercial. Other possibilities include radio commercials and small-scale billboards. After the ads are presented, have the students choose a favorite and give a reason for the choice.

Your class can benefit from studying PC ads, if only to realize that a variety of meanings can be conveyed in one or two brief statements. A study of word usage can help them become more adept at manipulating words to reach certain audiences. This can be useful in both personal and formal modes of communication.

All students need to recognize strategies used in advertising. Only then can they learn to make qualified judgments about products without being unduly influenced by the power of the pitch.

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STRATEGIES TO BATTLE THE PROBLEM OF ACADEMIC INERTIA

Pepper Worthington

What are the causes of academic inertia among scores of modern students? Why are the times out of joint for the young? Why are students simply bored with school? Such questions merit more than a single article; however, in the compact conciseness of a few guesses, (perhaps a modern dilemma itself), I wish to pinpoint four causes of malaise among modern minds and attempt, not as Hercules in the stables of Augeas but as Lily Briscoe on her own canvas, to suggest four strategies to battle the problem of academic inertia. And indifference, malaise, inertia, pure laziness, or whatever teachers wish to describe as the mood of the young, these ingredients do ferment into a bone-hard classroom battle. Teachers facing the blank faces and bored spirits are forced to come together to invent and to incorporate strategies to battle the inertia in the classroom.

In trying to locate the causes of malaise among students, four realities stand out in my mind as crucial contributing factors to inertia: (1) television as a source and promoter of immediate gratification, (2) a fast-fermenting world where computers spit out records, calculators add numbers, and technology in general speeds the rhythm of answers, (3) a nuclear-age future with its uncertainty, (4) a defiance of belief in an age which doubts abstractions and court materialism.

Check with your particular students to get an estimate of how many hours a week they watch television. Forty? Fifty? Sixty? You might be stargled at the passive watching hours of your own students. You may create your own television quiz to see how many watch the evening soap operas, "Dallas," "Falcon Crest," "Knot's Landing," and others. sprinkle your test with matching—names to shows, television starts to show characters. Do students know who J. R. is in life or do they see Larry Hackman as J. R. only? Hackman told a talk show host a funny story. He was on a New York Street when a child passed him. The child jerked around, dashed up to Hackman, kicked him, and said, "I hate you J. R., I hate you."

In making your observation with your students and the impact of television upon their minds, try to test them on problems posed and problems solved on shows. Observe if children exhibit an attitude of sixty-minute solutions. Whatever catastrophe occurs within the sixty-minute time frame, some denouement is reached—usually with the popular characters successful and the less desirable figures fated to fade away. Justice reigns and problems are solved quickly in the television syndrome. Shouldn't then life be this way—quick, just, easy, and manipulative?

A third observation you might wish to pursue with your particular students is television's insistence upon immediate gratification. Clairol may change your life, according to dazzling Linda Evans. L'Oreal may be expensive but beautiful Meredith Baxter Birney is worth it.

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Drive a Datsun 280ZX and you will have the immediate gratification of gorgeous women hovering over you in your car. Pop a Certs into your mouth and the magic of a long-desired kiss will come to you. Chew Dentine and that special someone will never turn away and reject you. Drink Gallo wine and the cocktail party with beautiful people will crackle with laughter, well-being, and success. Wash your clothes with Tide and you'll get the whiteness you never dreamed you could get immediately. Keep your man happy by whisking away ring-around-the-collar with Wisk and create your elegant meal with Weight Watcher's delight. Voila! Success. It's magic—immediate, sensual, gratifying. That's life, isn't it?

With immediate gratification as a built-in demand, the slowness of excellence is not valued. Why walk when you can drive a fast-paced car? Why learn to add or subtract or divide when a calculation can do it for you in a second? Why read when you can watch a two-hour story that would take you a week to read? Why learn to read music when you can just pick up the beat? That struggle for excellence is not a part of our age now and young people are not to blame. They reflect the symptoms of a culture gone bezerk in immediate gratification. By ten many young people have had all the ice cream, toys, candy, clothes, bikes, movies, and objects their depression--decade parents never had but were going to make sure their children had. By sixteen many young people have experimented with sex—thanks to television, magazine allurements, and the birth control pill. By eighteen many have been to Europe. What's left? Why work for anything? Life comes easy, doesn't it?

Let us focus on a second influence upon the mind of modern students—the impact of a fast-fermenting world where computers, calculators, and technology whiz us through a day. An answer must be quick now, must't it? Whoever heard of spending an hour on one paragraph to experiment with sentence variation, vocabulary words, and figures of speech? Whip it out and let it go. That's good enough. Isn't it? In short if a problem, an assignment, a duty, or a lesson can't be done quickly why do it? after all a student could be sixty miles away from his desk in an hour.

A third cause permeates the inertia of a modern student—the nuclear-age future with its uncertainty. None of us know really how much an impact the fear of a nuclear holocaust has upon us. Like all unpleasant realities we push the undesirable knowns into the recesses of the collective unconscious and hope we don't have to face these ugly smells, brutal blasts, or evil justifications. Instead we divert the fear of the nuclear uncertainty by developing a shell of indifference to our future. I have had students to ask, "What does the future offer? How should I live with insecurity? Why should I study when no job is out there for me? how can I live with possibilities only? why can't possibilities be probabilities or sure things for me? Thus, a shell, like a pearl of protection, coats the lining of a student's hurt heart. And the sense of uncertainty, fear, and a nuclear annihilation is real.

I observed a curious phenomenon in my class last spring. We were all seated in our desks in room 111 in the Henderson Building at Mount Olive College. It was a spring day: lovely, warm, soothing. All the students are aware that Seymour Johnson Air Force Base is ten miles away from us and that our area is a nuclear-target zone. We were reading John Stuart Mill's essay, "On Liberty," when suddenly—as if out of another universe—the room shook. A jet overhead had broken the sound barrier, but when the air cracked and the room shook, all of the students fell to the floor. It was

as if everyone experienced a spontaneous reaction of seeking cover or protection, and the floor seemed the best place. I looked at them and said with a certain queasy dignity, "That must be a Seymour Johnson Air force plane breaking the sound barrier." Their faces were white like Tide sheets. The collective unconscious had erupted.

A fourth cause for academic inertia among students may be our age of abstract defiance and materialistic mania. What counts among many young people and adults is not the intangible worlds of ideas, dreams, visions, hopes, beliefs, quest, convictions, or feelings, but the tangible worlds of Izod shirts, Polo pants, Birdwell bathing suits, Niki tennis shoes, Calvin Klein jeans, Ross ten-speed bikes, Jordache dresses, a Seiko quartz watch, Esprit shorts, Members Only coats, Samsonite luggage, Ainger pocketbooks, Cabbate Patch dolls, Wilson tennis balls, spaulding basketballs, Mitchell fishing gear, the Michael Jackson glove, brick houses on the right street, memberships in the country club, and friendships with children whose parents are professional prototypes. In America if you are a success as a person, you can show it visibly. The invisible ramblings of a quiet soul in quest of meaning rather than materials are eccentric. If your parents are in a certain income bracket, then you are clearly defined as a certain class type—upper middle class or lower middle class or middle class ad infinitum. And in America what you are able to command or to fetch for yourself in this open, free market mirrors who you are. And of course, the world sees. Only the visible, materialistic, tangible world is the real world. Other worlds are figments of the imagination. After all, if God is in charge of history, why are we in such a mess? whoever changed because of an idea? Who works today for less money but more meaning? this world is pragmatic, isn't it? You can't live on a faith in people when people are bad, can you?

So—academic inertia erupts like broken sound waves. And we are teachers before an avalanche of blank faces, fast-paced heartbeats, materialistic-mirrored eyes, and collective unconscious fears. What are we to do?

Who knows? Not I for one. But—being a teacher means that I have something in common with all my colleagues across the face of America. I want to define what exists and to develop a strategy to confront what exists—either to reinforce what is healthy or to heal what is sick. Teaching in its etymological roots goes back to the Middle English techen, to show, to instruct. Pushing the word back to Old English, we discover tacn, a sign or token. Perhaps one function of a teacher is to discover signs and show them.

I wonder if there are not some strategies we can develop to confront academic inertia. four strategies come to my mind as a starting framework—four being a good number to corner the causes, making the square the image rather than the ceaseless circle wheeling us from one crisis to another. Therefore, suggested strategies are:

1. Cultivate habits which postpone immediate gratification.
2. Develop active participation in specific commitments which demand a certain lowness, struggle, and self-consciousness.

3. Turn to the inner life in order to establish security within before security without before attempting security without.
4. Develop an appreciation of the intangible realities of the world.

To focus upon the first strategy, namely, the cultivation of habits which postpone immediate gratification, I would suggest teachers listing habits for their age group. Perhaps some of the following habits could well match the mood and maturity of a variety of academic levels.

First, try to get your students to cultivate a habit of homework time. Whether desired or not, get a student to set aside a certain amount of time to do the drudgery of homework. Homework itself is not an immediate gratification. The fruits of study grow, increase, and emerge in time.

Second, try to get your students to think in longer stretches of time—from the beginning of the semester to the end. Should a project, a term paper, a creative story, or a supplementary novel be a part of the semester's requirements, get the students to think of beginning now for later, or building stages of work in order to have a complete paper later. The emphasis should be upon stages of development. Perhaps drill home the reality of the medieval concept of the cathedral—a concept which might start a cathedral with one Pope but never be finished until two Popes later.

Third, perhaps invent a game of delay tolerance. Create within students a sense of delay by introducing a famous passage in Shakespeare, later elaborating on that passage when it leisurely occurs in the drama. Introduce an image in a study and build a unit with that image so that clarity does not come right away but is delayed. Build suspense. Create that sense of anticipation which is more exciting than consummation—at least in Keats' poetic view in "Ode on a Grecian Urn" as he proclaimed to the impatient lover: "She cannot fade though thou hast not thy bliss/Forever wilt thou love, and she be fair" (lines 19-20).

Fourth, try to raise a question in class which you don't answer. Get the students to want to know the answer but make them dig, wait, pursue, and discover. Don't let the question be an easy one. Make it a challenge like a treasure hunt. Call this strategy your question-hunt game. And any hunt becomes more exciting when the end of the hunt is difficult, far-reaching, and a sheer endeavor of stretching. Perhaps pose such questions as these: (1) I wonder where Newton was when he thought of his theory of gravity? Why did he conceive his theory then? (2) I wonder what Darwin really thought about the missing link in evolution? Did he think there was one? (3) I wonder why Archibald McLeish decided to write a play on Job? (4) What caused Keats to recognize he had tuberculosis? Where was he when he diagnosed his own illness? (5) I wonder why Lewis Carroll wrote stories about a girl named Alice? (6) Why did George Eliot use that particular male name to sign her books?

Questions could tumble out of every teaching situation and teachers could use this question-hunt game as a strategy to cultivate habits which postpone immediate gratification.

Now let us shift to a second strategy to battle the problem of academic inertia: the development of active participation in specific commitments which demand a certain slowness, struggle, and self-consciousness. What are some specific commitments teachers can use in the classroom?

Why not try a salute-to-the author commitment? Have students pick a favorite author—in any field—and make a commitment to read everything possible by that author by a deadline date. The end result will be a salute-the-author tribute, presented to the class, evaluated by the class, and analyzed by the class. At the end of all the salutes, have the class choose three authors they would rather have if they were confined to a prison war cell. This commitment demands a certain slowness, struggle, and self-consciousness.

Or why not try a grammar-mistake hunt? Have students hunt for grammatical errors on billboards, on advertising posters, in magazine stories, in newspaper ads or items, on television commercials, in modern songs, and in conversations. Have them keep a notebook of grammatical errors spotted and make this grammar-mistake hunt a hot contest. Make a rule that each grammar error spotted must be corrected in the student's notebook to count. Have a prize (trophy perhaps) for the student who spots the most grammatical errors over a semester's time frame. Make this big news in local papers or an issue among competing grades. Create a sense of pride in spotting errors and in asserting correctness. Indeed, does not this grammar-hunt demand a certain slowness, struggle, and self-awareness?

A third strategy to battle the sagging enthusiasm of modern students is to create this: emphasis upon the inner life. How can the inner life of any student be developed?

One technique often used at all ages is journal writing. Much has been written about the psychological therapy of journal writing, but I would like to emphasize another side of journal writing that has not been emphasized as much. It is true that the journal opens up feelings and ideas. It is also true that journals are private, secret sources of dealing with the unspeakable. But journal writing may become a useful habit for students, a habit of thinking on paper, so that the process of the writing itself becomes an effective way of bringing the unconscious to the conscious.

Let us imagine the following experiments with the process of journal writing: (1) Suggest to your students to use their journal immediately after an argument. Write out the dialogue which occurred to see on paper what their perception was. Surprises might spill out. (2) Use the journal in the midst of a crisis. Write out the dilemma, analyze it, and reflect on it. (3) When new people pop up in their life, have students write down their own impressions. Then a month later have them check out their impressions to see how accurate their first response was. If there is any difference, why? (4) Suggest to them to turn to their journal when they are outrageously angry. Have them beat their anger out on paper. See what happens then. (5) Suggest to them to develop the habit of listing what makes them happy when they are happy. (6) Turn to the journal as a source of recording whatever proves interesting to their individual minds—a joke, a one line maxim, a particular look, an incident which has a peculiar twist, a mood, an idea.

Using the journal as a habit of developing the process of thinking on paper will inevitably transfer to developing the process of thinking anywhere. So an added delight will be a stronger sense of the unconscious mind working in conscious responses.

A fourth strategy to battle the emptiness of student motivation is to introduce a sense of the value of the intangible. Despite America's insistence upon materialism, students are hungry and thirsty for something more than an Izod shirt, a Datsun 280ZX, or a Seiko quartz watch. They want meaning. They want a raison d'etre. They want a future with hope. They want to know that hard work or strict discipline pays off in more than a human price tag. How can teachers create a love for abstractions, a yearning for Beauty, or a search for Truth? If I knew the answer to these questions, I would be working on some international exommittee appointed by the President. These questions have no clear-cut answers. That's why they are fascinating.

To create a sense of the value of abstractions, I might make a few observations, though techniques remain uniquely individual, a process of one's own sui generis. Perhaps a sense of search begins within the teacher. Students probably sense an urgency of quest from the teachers before them; they sense tumbling questions, a rigorous insistence upon values, and a constant search for compassion. Teachers who have a yearning for Beauty and Truth may ignite in students a desire to search also. If a student says, "I want what that teacher has," then something has happened.

Probably (again we have moved from the Aristotelian possibility to probability, awaiting the next step to necessity) teachers gain a sense of the urgency of the intangible through their own pilgrimages. Teachers who have suffered may come to realize that if God's presence is anything, it might be healing. If Truth exists, it might set the spirit free but not at ease, complacent, or passive. If Beauty exists, the love of what builds from the earth up to the sky might penetrate the sweat of somebody's brow. In other words, the presence of abstractions such as love, compassion, Beauty, Truth, values, god, dreams, ideas does not fall out of the sky into anybody's lap. These abstractions become significant from the ground up, from the life lived, from the discovery that the unseen is far more powerful than the seen. And how do teachers discover this reality and then reveal this to students? I don't know. I'm still stumbling into despair, wandering through Vanity Fair, listening to Talkative, waiting for the helicopter to take me across the river.

Alas, the battle with student inertia is not an easy battle because this battle is a microcosm of the larger battle at work in history: mankind's battle with Grendel, Grendel's mother, and the fire dragon. Grendel must be fought in Heorot (the heart); Grendel's mother must be fought in the subterranean caves (subconscious); the fire dragon must be fought at the end (death).

Why do some students rise up, take the sword and enter the world's battle with skill, discipline, willingness, and faith? Why do others hide behind rocks, smoke pot, mock effort, sleep in disgust, and sink into indifference?

I don't know for certain. I have suggested four causes: (1) television as a promoter of immediate gratification, (2) a fast-fermenting world which spits out answers too quickly, (3) a nuclear-age future with its uncertainty, (4) a defiance of abstractions in the whirlwind

of materialism. I have suggested four strategies to battle this academic inertia: (1) cultivate habits which postpone immediate gratification, (2) develop active participation in specific commitments which demand a certain slowness, struggle, and self-consciousness, (3) encourage an inner life, (4) develop an appreciation of the intangible realities of the world.

But in the last analysis the great challenge is to pick up the sword ourselves, as teachers, face Grendel, Grendel's mother, and the ever-present fire dragon, our sentence of death.

Alas—why is that sword so heavy?

TAKING THE PLUNGE INTO COMPUTERS: ENCOURAGEMENT FOR TEACHERS

Today many teachers worry about being rushed into using classroom computers before they understand the new machines. A booklet from the ERIC Clearinghouse on Reading and Communication Skills and NCTE helps teachers take the first steps. COMPUTERS IN THE ENGLISH CLASSROOM: A PRIMER FOR TEACHERS explains the kinds of things today's computers can do to support the teacher of English.

Authors Sally N. Standiford, University of Illinois at Urbana-Champaign; Kathleen Jaycox, Morton College, Chicago; and Anne Auten, ERIC/RCS, have been involved with computers and the teaching of English during the recent rapid advances of this new technology. They sketch the most important current uses of micro-computers for instruction in language, literature, and composition, plus their potential for testing, speeding up record-keeping, and analyzing the effectiveness of lessons. They stress the computer's value as a tool for relieving the lockstep quality of classroom teaching. The machines' patient, individually-paced coaching in routine learning tasks frees the teacher to plan and conduct reflective discussion and other activities calling for analysis and other higher skills.

The authors also explain the limitations of computerized instruction, suggest how course material needs to be identified in order to program it for the computer, and list sources for evaluations of new products and criteria for assessing software's effectiveness.

COMPUTERS AND THE ENGLISH CLASSROOM: A PRIMER FOR TEACHERS. Price: \$5.50; NCTE members, \$4.75. ISBN: 0-8141-08180. LC: 83-61710. Available from NCTE, 1111 Kenyon Rd., Urbana, IL 61801. #08180.

KNOWLEDGE AND IMAGINATION

Hugh Burns

A story from the Associated Press:

A student who raided a computer that operates the University message board and threatened to make it display "anything we please," was lured into a trap by the promise of more computer goods, authorities said.

Another story:

"I got quite scared there for a minute," said Shawn K. Riddle, 18, a freshman at Oklahoma State University, who was arrested in a phone booth in the dormitory. Riddle was accused of using his home computer to gain access to a computer and enter messages that could have wound up on a display at a busy Stillwater intersection. "You thought WAR GAMES was a movie, but it is a reality," read one message. Another warned, "There's no way to catch us."

There's no way to catch our students any more. They're catching us. They're catching us faster than we can believe.

One hundred years ago Matthew Arnold in his "Discourses on America" wrote of U. S. education this:

The tyranny of the past, many think, weighs on us injuriously in the predominance given to letters in education. The question is raised whether, to meet the needs of our modern life, the predominance ought not now to pass from letters to science; and naturally the question is nowhere raised with more energy than here in the United States. The design of abasing what is called "mere literary instruction and education" and of exalting what is called "sound, extensive, practical, scientific knowledge" is in this intensely modern world of the United States, even more perhaps than in Europe, a very popular design, and makes great and rapid progress.

It seems that statement might have been written right now instead of in 1882.

But what was going on in 1883? An Austrian citizen, Ernest Mach, the philosopher, was taking apart Newtonian schemes of time and the universe. Einstein would be reading Mach. Einstein would describe in his autobiographical notes that Mach "exercised a profound influence upon me in this regard when I was a student. I see Mach's greatness in his incorruptible skepticism and independence." Incorruptible skepticism and independence? Shawn K. Riddle, Oklahoma State, 1983, is one of those students who's showing some of that independence and that incorruptible skepticism as well. And they're in our classrooms. And they're in our English classrooms. And the question for English teachers, with this new technology all around us is "what are we going to do?" We're scared of the technology as well.

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I had a chance this past year to meet Bettie Sellers, the poet laureate of Georgia. And she had a poem that really struck me. The poem is entitled "Complaint to Beauty"²

I used to know—
I used to know that the stars were stars
and stayed wherever in that distance space
their ordered orbit was.
The sky was snug with Cassiopeia's Chair,
and night
had big and little bears to hunt.

Then winking, moving lights began to stich
an arch from Sunset ridge to Raven Cliffs.
Planes to Birmingham and points beyond traveled,
with travelers drowsing past sleeping hills,
frozen like dark velvet
with ribbons wound from lakes and streams,
silver in reflected light.

Now satellites invade the ridge.
The star I thought was Venus rising
keeps rising out of sight
to bring the morning news,
and wars are instantaneously played
on beams that tear Orion's belt,
divide Andromeda.

"And wars are instantaneously played/ on beams that tear Orion's belt/ divide Andromeda." that poem has something I'm going to typify and call the electronic imagination. trying to cope with the technology from the point of view of the humanist. Einstein talked about imagination and knowledge, and said that imagination was more powerful than knowledge. Imagination is more powerful than knowledge.

What has happened in the way we're approaching English education today is that we're so wrapped up in the knowledges that we need to know, that we need to use, in the data bases, that often we forget to apply the imagination to those data bases. Imagination is more powerful than knowledge.

Okay. What do we do as English teachers with these kinds of students? My background's rhetoric. I'll try to answer by attending to the five parts of rhetoric and tell you some things that are going on.

Invention. The process of discovering our ideas. That's the particular area that interested me in artificial intelligence in the first place. A. I., as it's called, is the attempt to make a machine intuit, to learn something, and to help someone. I'll talk about that in a little while.

I started writing programs in 1977. The INVENT series consisted of three programs. The first, we called TOPOI, was a program that queried students, using aristotle's topics. The second, called BURKE, was the Burke dramatic pentad: scene, purpose, act, agency, and agent.³ The third was called TAGMEMICS. I tried to write software to imitate the system of Pike, Becker, and Young.⁴ I did not do that with the computer over here, saying, "I have a computer. Let's do that." What I had in mind was trying to find out how these heuristics work and how they interact with

students. The computer was and will always be for me a tool to help us do that kind of instruction. In fact, we probably should do our best to wean students from the computer when they realize that they don't need it to do what their minds are already doing.

TOPOI was a program that basically asked questions. the student would come, long on, give his name, then go through a series of questions.

"Mark, what is your topic today?"

"I'm going to be writing about N-dimensions."

"Good, Mark. Go on. What is your purpose?"

"Well, I'm a physics major here at Yavapai College, and I got interested in exploring N-dimensions and how they work."

"OK. Fine, Mark. Is there anything else you want to add at this point?"

"No."

"OK, we'll store your purpose for you and show it to you again later so that you can keep remembering why you're writing your paper."

"Beep. Beep. Now remember that I'm a machine. if something goes wrong, scream for help, and somebody will probably come in and help.

First Question: "Mark, what are the public consequences of N-dimensions?"

"I don't know."

"That's too bad."

Pause.

"Your turn, Mark."

"I—I don't know what you want me to say."

"Well, let me reexplain the question. By public consequences, I mean, those things that are governmental, inter-agency, the kinds of things that concern your topic, whatever it is."

You see, the topic can be dropped in. It could be SALT II, Vitamin E, the Frescoes of Michelangelo. You've all gotten those letters from Reader's Digest haven't you, the ones that begin "Dear Hugh Burns . . . , Dear Jim Pence . . . ? Well, in the same way, the student's topic is dropped in. The trick to open-ended computer-assisted invention is in trying not to give a menu to a student, but always to make the student writer type something in. The student types something in and gets feedback instantly.

When students finish their dialogue with the computer, they get a printout of that dialogue to take with them. Instead of coming up to me, the English teacher, and saying, "What should I write about?" A student can say, "I would like to write about the public consequences of N-dimensions."

N-dimensions—I'd better define that. (If there's a physicist here, I've probably already blown it.) The first dimension is a point. Two dimensions is a line. three dimensions is our space. The fourth dimension is us in time. Now the problem physicists today are considering is N-dimensions. What we have is two three-dimensional (in time, four-dimensional) universes going back and forth. That's good. But what about fifth dimension, sixth dimension, seventh, eighth, ninth dimension as we compound time and the relativity of time? That's N-dimension? Lots of physics research is going on in this area. I chose it as an example because it's certainly an apt metaphor for teaching.

Are we teaching in the first dimension, the point—the comma splice, the "AWK" in the margins? Are we teaching the linear model—start at the beginning and finish? Our students write those models often, usually right before a paper's due. Are we teaching them three dimensions—space, with imagery filling out the piece? Are we considering the fourth dimension—the consequences of the writing act and the process, and how this writing act engages the next writing act and the next and the next? So N-dimensions is a powerful metaphor. I'm sure glad that student decided to write about it. But I didn't ask him.

Some names: Helen Schwartz at Oakland University has been pursuing work-invented kinds of software. Bill Wresch in his program at the University of Wisconsin Center-Marinette about arms in Drexel. Ray Rodrigues and Dawn Rodrigues in New Mexico. Valarie Arms, at Drexel University. Ellen Nolan, by the way, did a lot of work in this area at Stanford, back in the 1970's, and, as a point of interest, she is now director for educational Marketing for the Apple Lisa, the new computer that's come out. Fellow English teacher makes good, right?

Arrangement. I wish I could think better about arranging information. I am no expert in serious discourse arrangement, but there's some very nice work going on at the University of Minnesota by Lillian Bridwell and Don Ross. He's trying to bridge the invention software. Cynthia Selfe is working in this area at Michigan Technological University. Bud Lawrence, again at Drexel, is also considering arrangement. But, going beyond the outline software, the question is, "Can we find out what the organizational principle is within the idea and then push toward the appropriate arrangement?" Anybody willing to help come on up after the meeting. This is very important, and I don't know if the software engineers, the knowledge engineers, are going to be able to address the question.

Style. the style lessons that we see are programs such as writer's workbench. Most of the work with that is going on at Colorado State University. Originally written at Bell Labs, it is programmed to read a text that's typed in and come back with such comments as "Did you know you said 'the fact that' (something E. B. White doesn't like very much) fifteen times in your paper? Maybe you would like to cut that down." it also figures readability. I typed one of my speeches in there, and it came out at a readability level of 5th grade. So I thought, "OK, I'll show you," and I typed in, "I would like to discuss the complex interrelationship between the heuristic principles of the tagmatic matrix and the relative hermeneutic principles." That came out high enough, so I balanced in between. So it's good for finding and adapting to an audience—that kind of thing. And it's being used at CSU. Other kinds of programs of the drill and practice variety are endless. These are good for those students that you identify as a teacher needing help. Why don't you go drill on the semicolon for a while, Terry, because, frankly, I've marked over 5000 semicolon errors this semester, and that one got me." Your students can have access to drill and practice, and I think it's good for them.

Memory. This is a good one, and it's one that is ripe for some attention within the English teaching community. How do we capture memories? What are the things that are going on in the imagination that we can capture in metaphor and in analogy, and tech? The debate is just beginning. I'll talk here about expert systems—some work I'm doing in the Air Force. An expert system is a system that knows a piece of specialized knowledge. Our current problem is fixing avionics boxes. How do you tell an 18-year-old to go out and fix a complex piece of avionics gear on an F-16? You give that person a tool. The tools are little "smart boxes" that they take out to the airplane and plug into place. The box will tell the symptoms, diagnose the problem, and get results.

"Good morning, Sgt. Brown. Now that You're here at the airplane, I'm feeling pretty good."

Well, that's probably not what it would say. It would say,

"I checked between Node A and Node B, and I find that I don't have any current here. Could you run a test? do you know where this part is—to run the test?"

And it would go into a diagnosis that would help that young man or woman fix our F-16 aircraft. So it really puts some memory into the system.

Now, how do we go from the knowledge represented in an avionics box to the symbolism of Moby Dick? "Have you checked the node on the top of the whale?" No—probably not that way. There are some interesting kinds of work to go on in that kind of metaphysical knowledge that we want to deal with.

The last is Delivery. Here we have programs like formating, with justified margins, or SPELGUARD, the program that reads for spelling, subject-verb agreement, things like that. Some of us are debating whether these are delivery programs or whether they belong under stylistics. Are they ornamentation or presentation? But, in any case, such programs are very helpful. Will you be able to legislate against the SPEL routine when you start accepting papers typed on a word processor? Absolutely not. The first time I ever used SPEL routine, it pointed out all the jargon. It said, "This word's not in my dictionary. do you want to keep it?" And I said, "Yes. Of course." But when it came to the same word again, it helped me see other kinds of things besides spelling. It was in fact teaching, and I was learning.

Lots of things are going on in science. But I heard a quote the other day: "The language of science is broken English." And it has some truth. How do we deal with the computers? Computers have to tell us how to deal with them. I saw a cartoon recently in which one person says to another, "The computer's been acting up. I don't know what it needs." "Well, go ask it." So they go off screen and one walks back in and says, "The computer says it wants me to get the entrails of a goat and spread it all over the keyboard." A computer archetype, right?

I don't like to be a prophet all the time. Wasn't it Mark Twain in the CONNECTICUT YANKEE who said, "A prophet doesn't have to have any brains. They are good to have, of course, for the ordinary emergencies of life, but they are no use in professional work. It is the restfullest vocation there is. When the spirit of prophecy comes upon you, you merely take your intellect and lay it off in a cool place for a rest, and unship your jaw and leave it alone; it will work itself: The result is prophecy." I predict more in the electronic imagination. I predict a greater role for us as teachers of writing, and thinking, and dealing with the technology. It has to come. That's an easy prediction.

So, how did I come to find Matthew Arnold's book and bring it here today? My wife Mary said to me, "We have to go down to the flea market and look for some things today." So I took my daughter Elizabeth by the hand—she had just bought one of those little things that tie on her head that have a little red pennant and bobble around—and so she's sitting on the cardboard box, and I'm going through other boxes looking for books, and here it is—a Matthew Arnold. I said, "Gosh, Liz, serendipity must be helping me again, because I need to prepare my talk for Jim Pence at Prescott next week, and I found what I needed here at the flea market."

But I want to tell you about an experience I had in teaching my daughter how to write poetry. she's 8 years old. She had been in a session observing Sherry Kartch, a blind woman who had come into teach music and creativity at Cimarron Elementary School in Aurora, Colorado. My daughter was new to the school and so was just watching. I sat down with her because she had to write a poem about it. So I asked her, "What did you see? What did you hear?" And she said, "Well, the blind lady plays music." And so I said, "Well, what are you going to write? did you listen to it?" And she said, "Yes." "Well, let's write something down." So she wrote,

Listen to the music the blind lady plays
When she begins to sing
About the nighttime, the stars, and the moon.

I said, "Lizzie, that's nice. Did you see or hear anything else?" She said, "Yes." "Well, describe that." She said, "There's a plant. The lady has a dog. I could write about the plant. I could write about the dog because the dog stays with her all the time. Could I do that, Dad?" "Yes."

Listen to the plant.
It grows very quietly,
But her dog starts to dream
About living on a cloud.

"Oh, Lizzie, I like that. I like that." "Oh, you do, Dad? Oh, gosh." Do you know something, now—she got a twinkle in her eye, and I saw something that was learning old—observation—and learning new. I looked in her eyes, and saw a little epiphany. She said, "They could trade places." I said, "Yes, they could. You know, there's a clock in the room." "There is? Oh. Are we listening to it?" And she stopped and said, "I could listen again. Is that OK?" "OK."

Listen to the clock
That ticks the song away
When the blind lady dreams
And her dog begins to sing,
About the nighttime, the stars, and the moon.

And therefore, to say the truth, I cannot really think that humane letters are in much actual danger of being thrust out of their leading place in education, in spite of the array of authorities against them at this moment. So long as human nature is what it is their attractions will remain irresistible. As with Greek, so with letters generally; they will someday come, we may hope, to be studied more traditionally, but they will not lose their place. what will happen will rather be that there will be crowded into education other matters besides, far too many; there will be, perhaps, a period of unsettlement and confusion and false tendency; but letters will not in the end lose their leading place. If they lose it for a time, they will get it back again. We shall be brought back to them by our wants and aspirations. And a poor humanist may possess his soul in patience, neither strive nor cry, admit the energy and brilliancy of the partisans of physical science, and their present favor with the public, to be far greater than his own, and still have a happy faith that the nature of things works silently on behalf of the studies which he loves, and that, while we shall all have to acquaint ourselves with the great results reached by modern science, and to give ourselves as much training in its disciplines as we can conveniently carry, yet the majority of men will always require humane letters; and so much the more as they have the more and the greater results of science to relate to the need in man for conduct, and the need in him for beauty.

NOTES

1. Matthew Arnold, "Literature and Science," Discourses in America. Quoted from English Prose of the Victorian Era (New York: Oxford, 1951), p. 1223.
2. I was unable to locate a copy of the poem, and so I apologize for any errors in transcription. MF
3. Kenneth Burke, A Grammar of Motives (New York: Prentice-Hall, 1945).
4. Kenneth Pike, Alton Becker, and Richard Young. Rhetoric: Discovery and Change New York: Harcourt, 1970.
5. Mark Twain, A Connecticut Yankee in King Arthur's court (New York: Hill and Want, 1960), p. 183.
6. Arnold, loc. cit., p. 1234.

MONDAY MORNING

BEGINNINGS

1. What are the first three words of the Bible? _____
2. Who composed *Begin the Beguine* _____
3. Which ceremony usually begins with these famous words: "We are gathered together . . ."? _____
4. When does summer begin? _____
5. What document begins with these words: "We the people"? _____
6. The "shot heard round the world" was the beginning of which war? _____
7. Who was the first person to have a mate? _____
8. Which was the first U.S. college? _____
9. What are the three commands that usually begin foot races? _____
10. Who made the first solo flight from New York to Paris in May, 1927? _____
11. Which U.S. President was first to begin living in the White House? _____
12. Which day begins a new week? _____
13. What, states the Bible, is the beginning of wisdom? _____
14. According to Euripides, what does a bad beginning make? _____
15. What, says an old adage, should begin at home? _____
16. Well begun is half _____
17. "I have not yet begun," said John Paul Jones, "to _____
18. According to H.G. Wells, what is ". . . the beginning of a beginning, and all that is and has been is but the twilight of the dawn"? _____
19. It is true that of a good beginning cometh a good _____
20. "The beginning," wrote Plato, "is the most important part of the _____

1-In the beginning. 2-Cole Porter. 3-Marriage. 4-June 21. 5-Preamble to U.S. Constitution. 6-American Revolution. 7-Adam or Eve. 8-Harvard. 9-On your mark, get set, go! 10-Charles Lindbergh. 11-John Adams. 12-Sunday. 13-The fear of the Lord. 14-A bad ending. 15-Charity. 16-Done. 17-Fight. 18-The past. 19-End. 20-Work. Score five points for each correct answer: 70-100 is excellent; over 50, good; below 50, oh well . . .

ANSWERS TO BEGINNINGS

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